BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

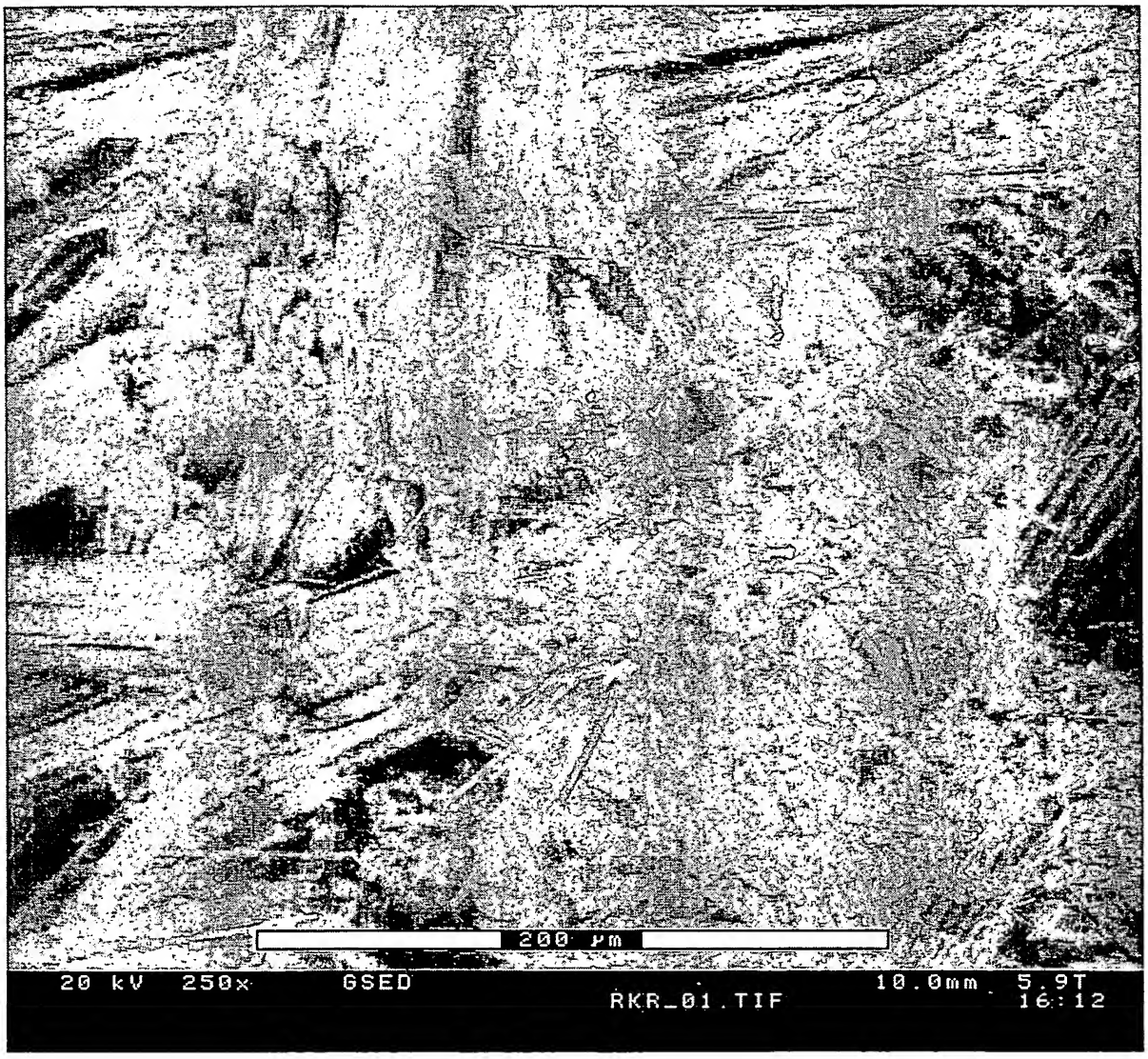
Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

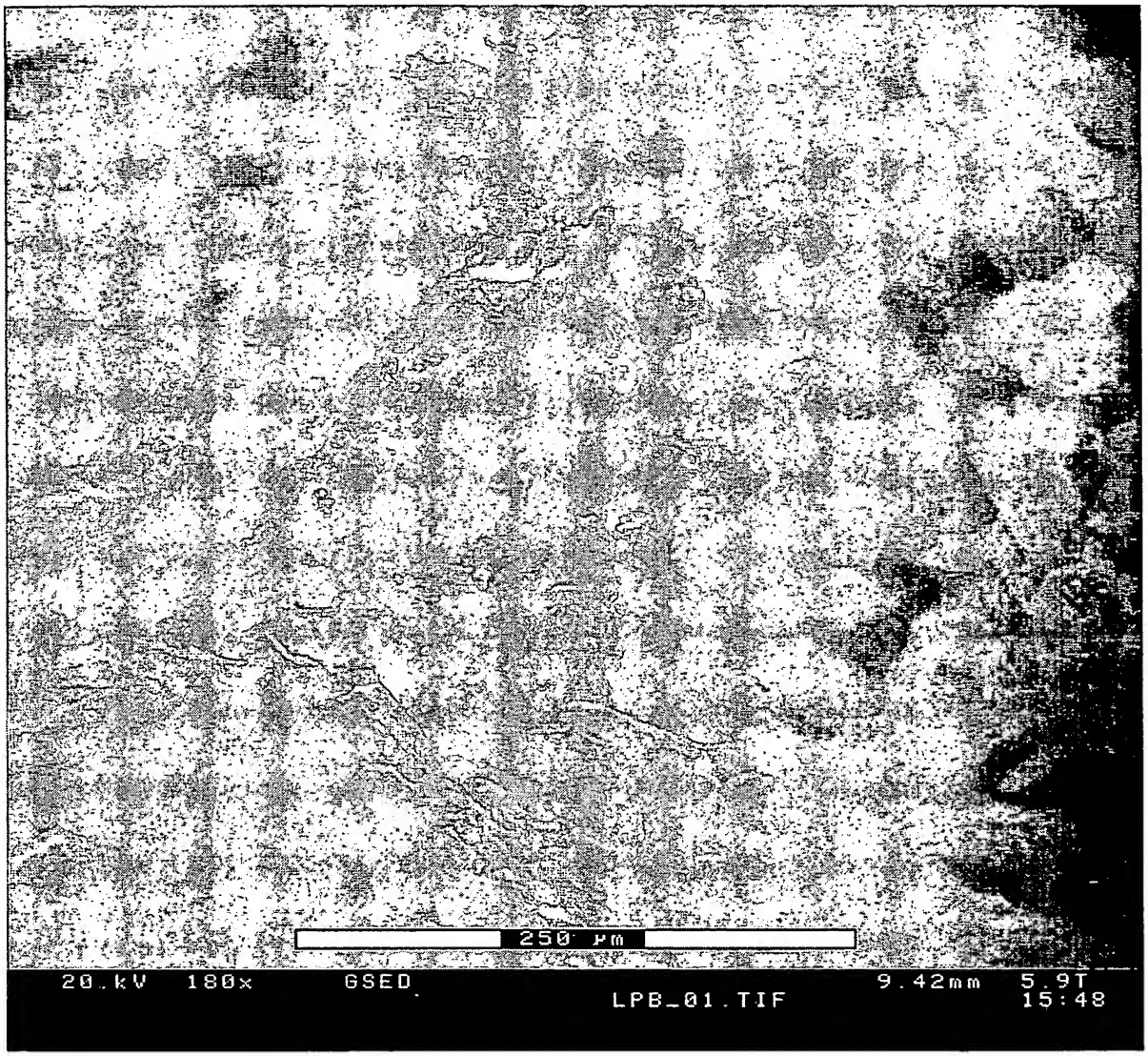
As rescanning documents *will not* correct images, please do not report the images to the Image Problem Mailbox.

FIG. 1



PRIOR ART

FIG. 2



PRIOR ART

FIG. 3

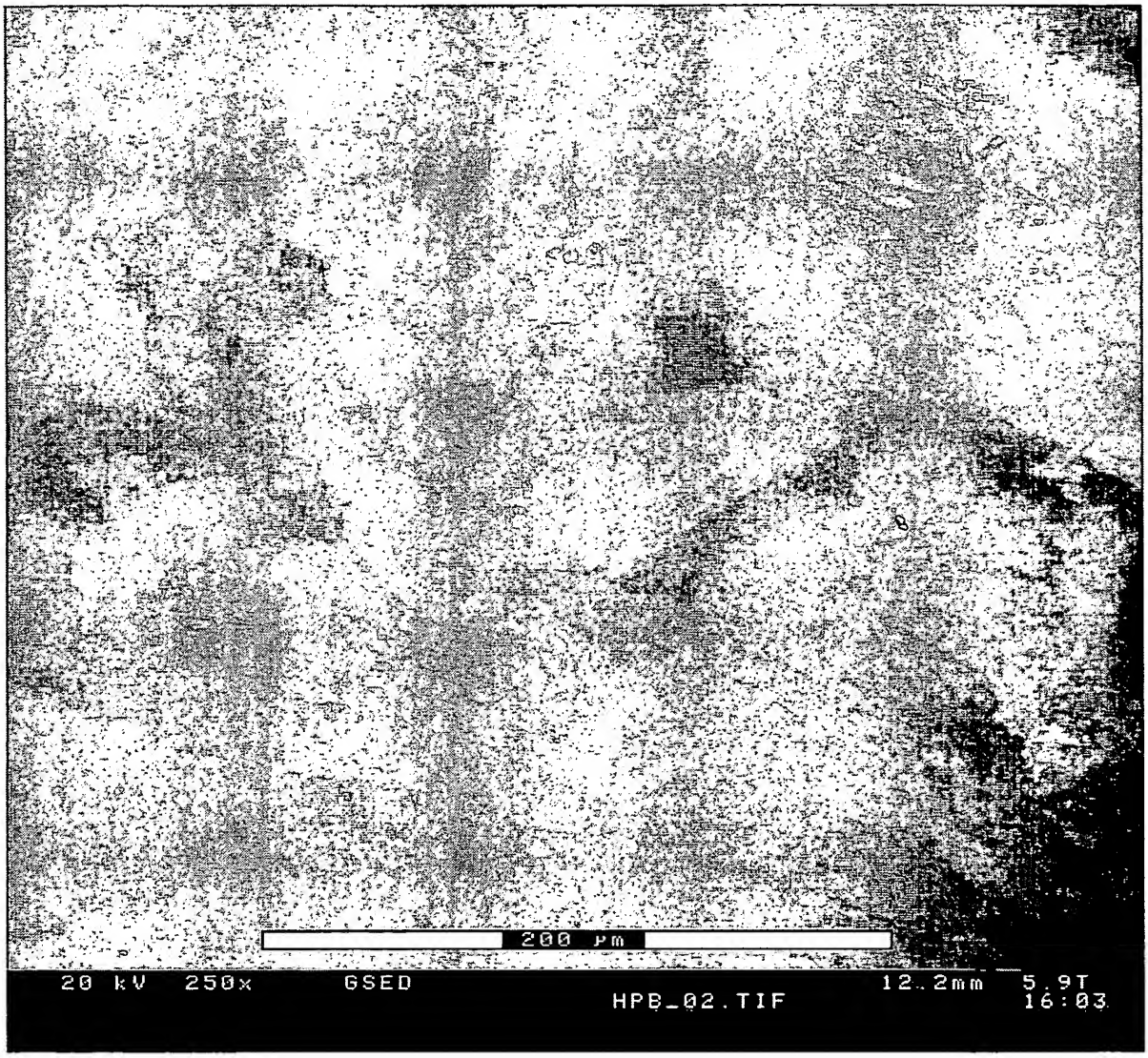


FIG. 4 Quality of Briquettes Schematic

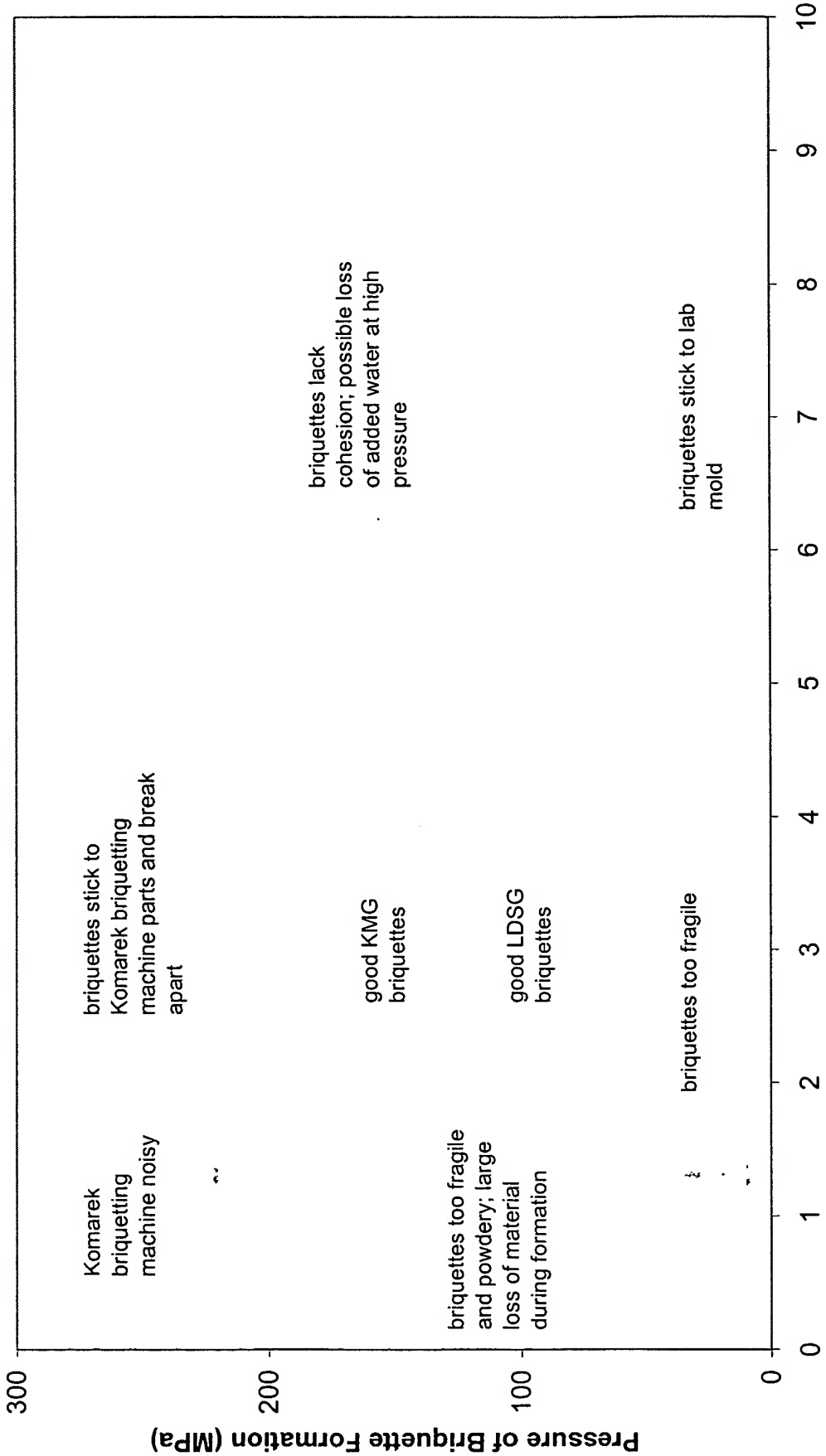
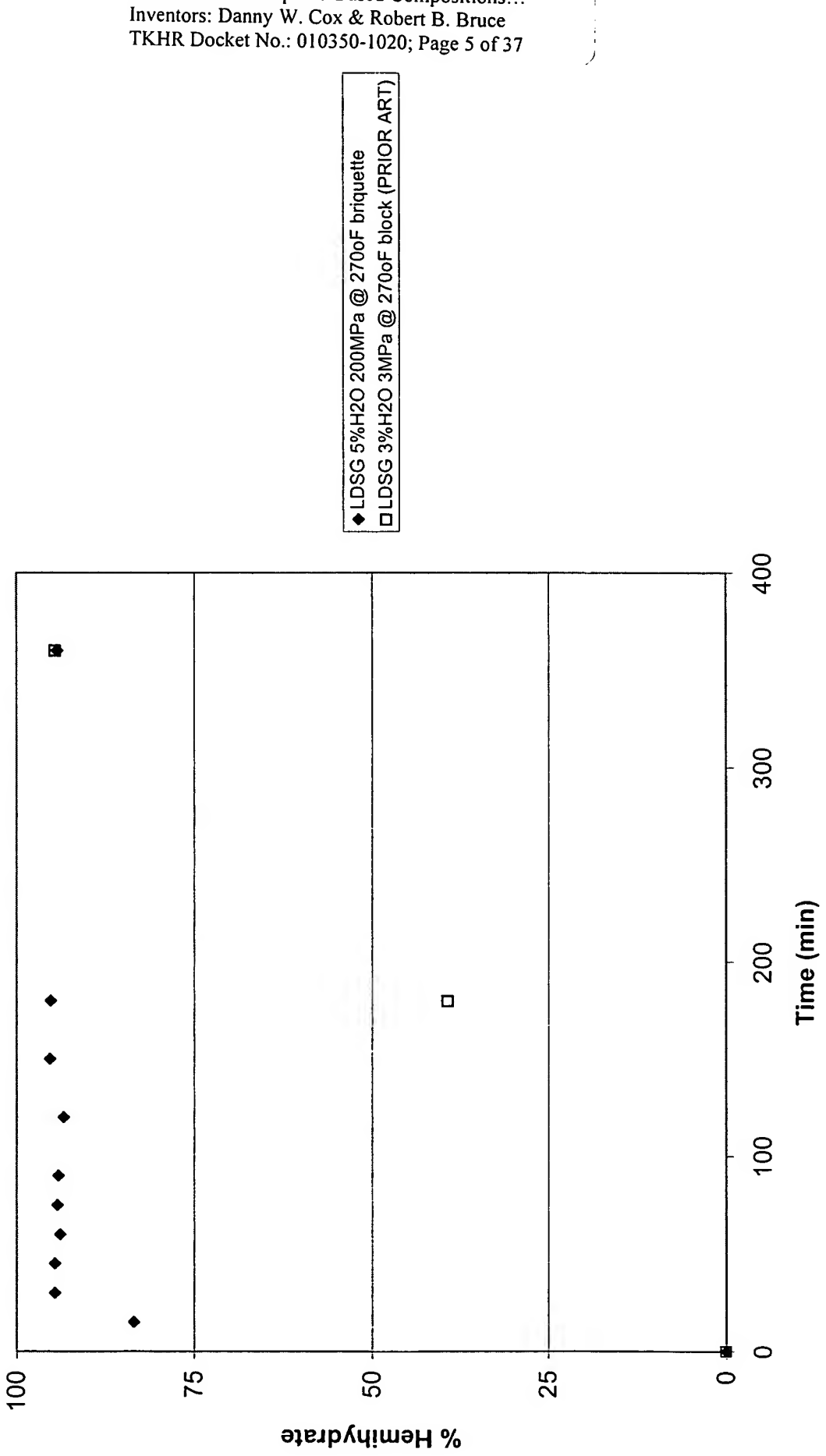


FIG. 5 Rate of Calcination, Briquette versus Block



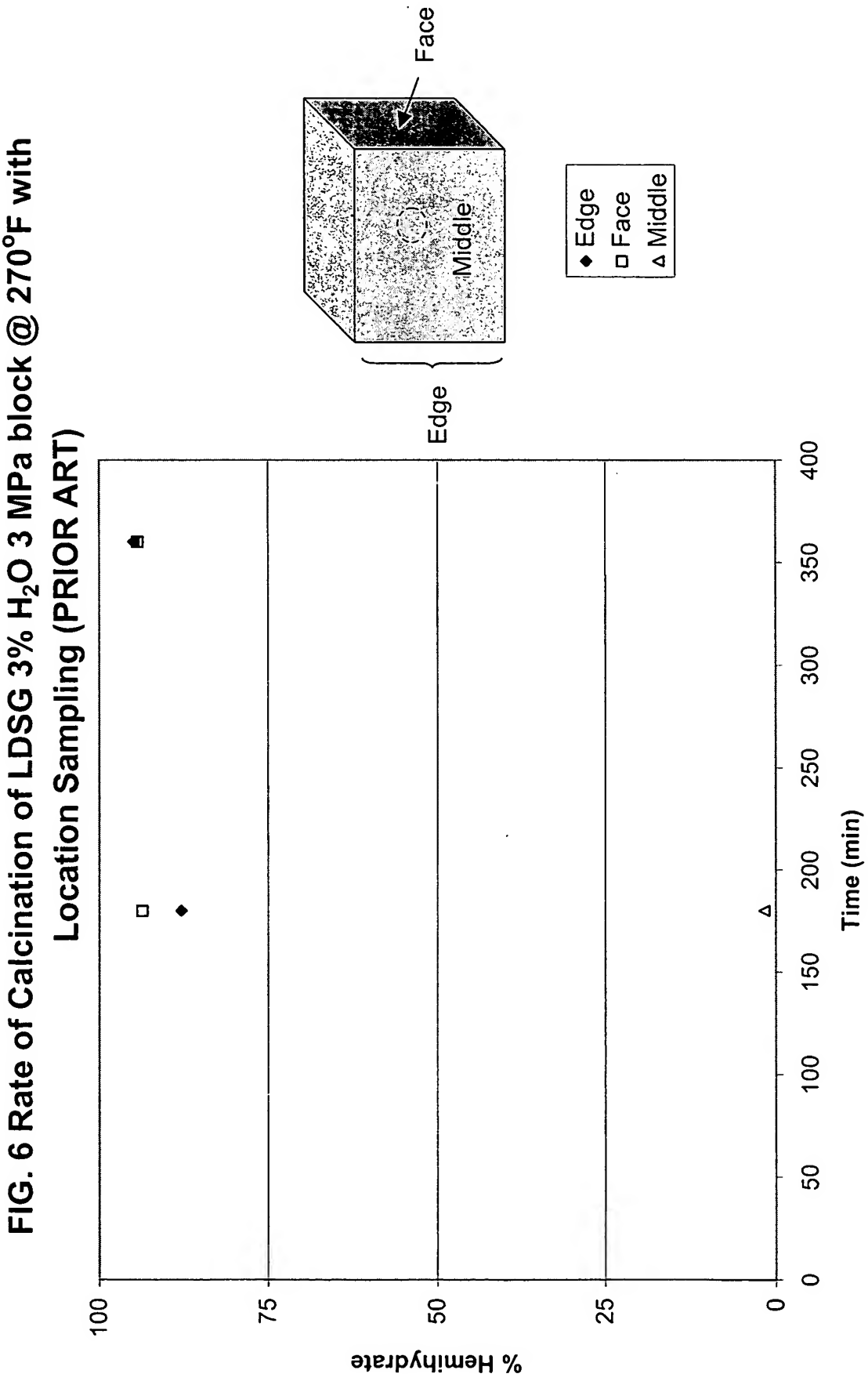


FIG. 6 Rate of Calcination of LDSG 3% H_2O 3 MPa block @ 270°F with Location Sampling (PRIOR ART)

FIG. 7A

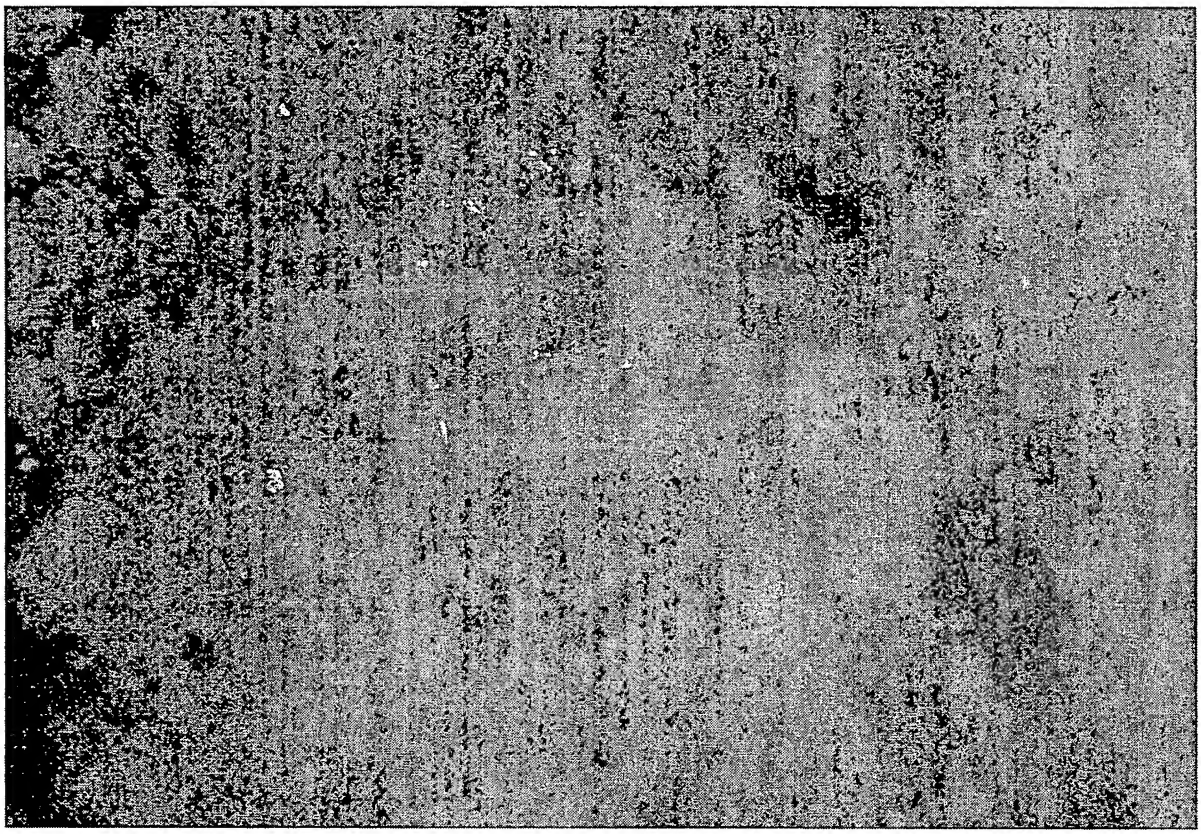


FIG. 7B

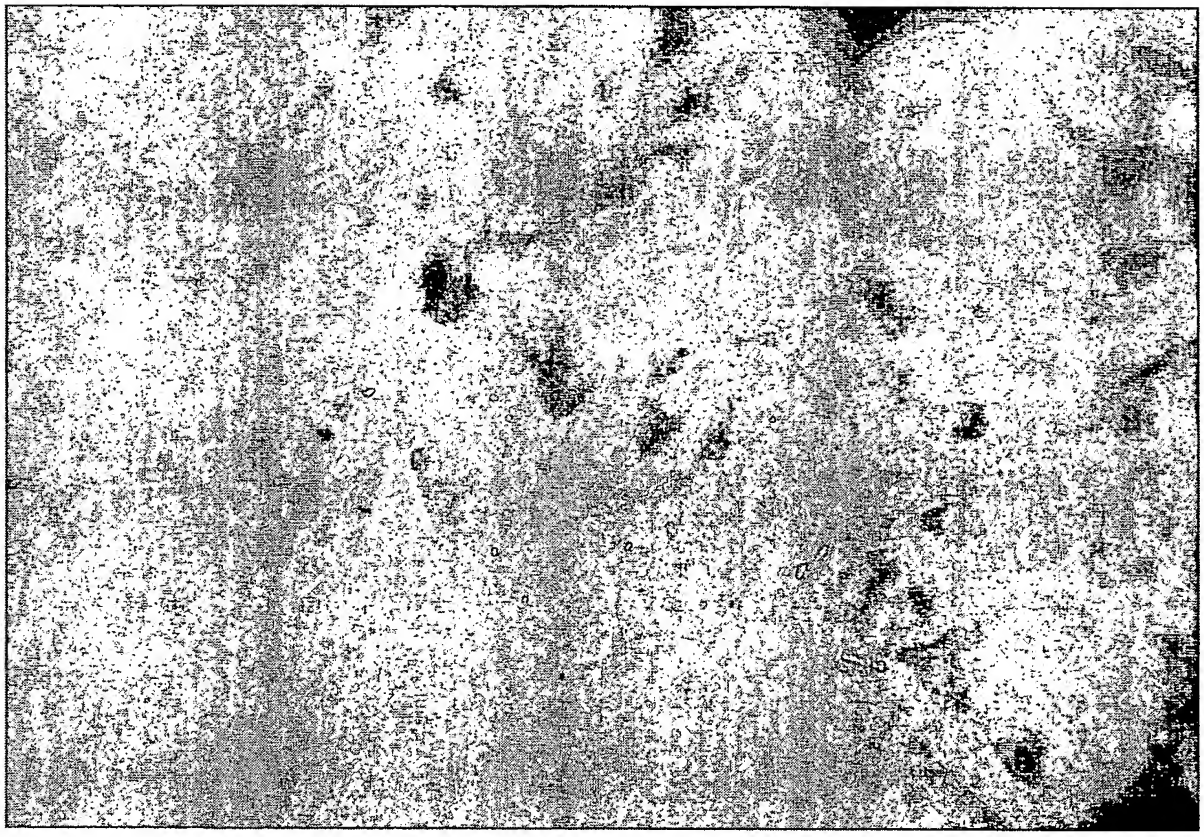


FIG. 7C

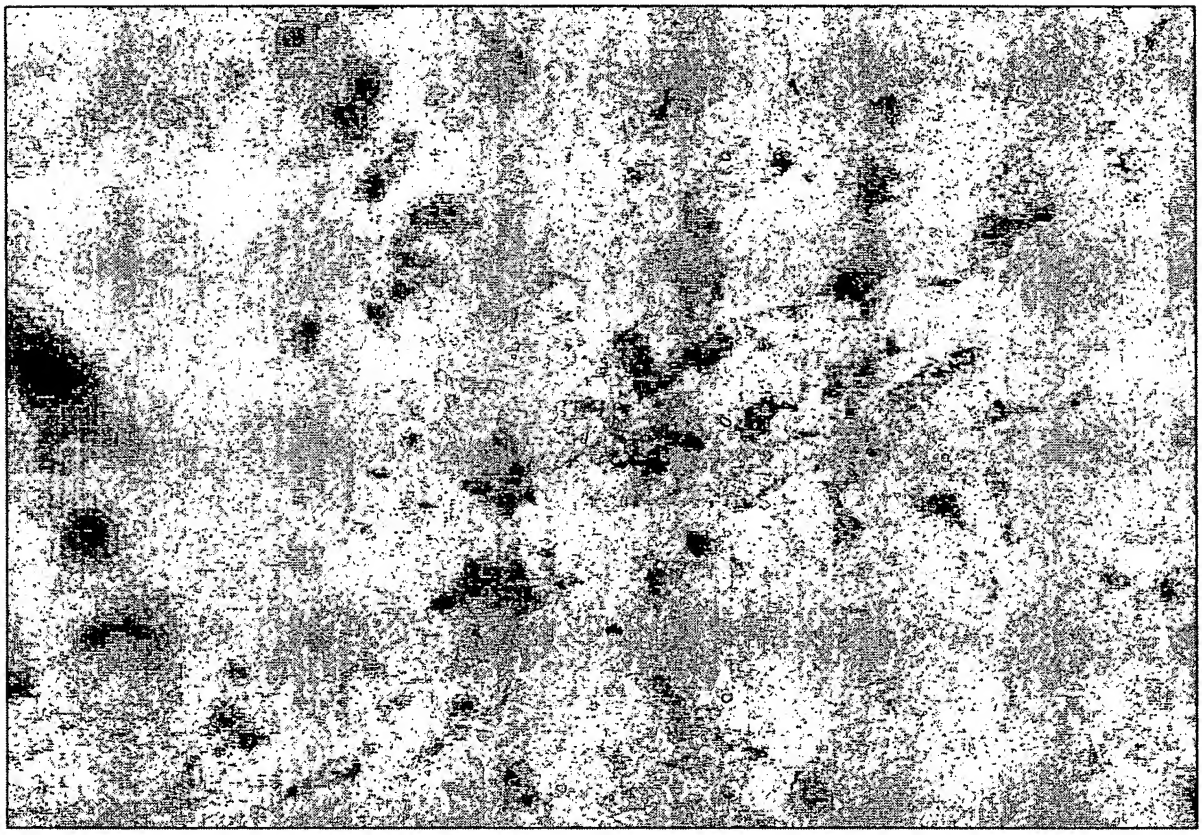


FIG. 7D

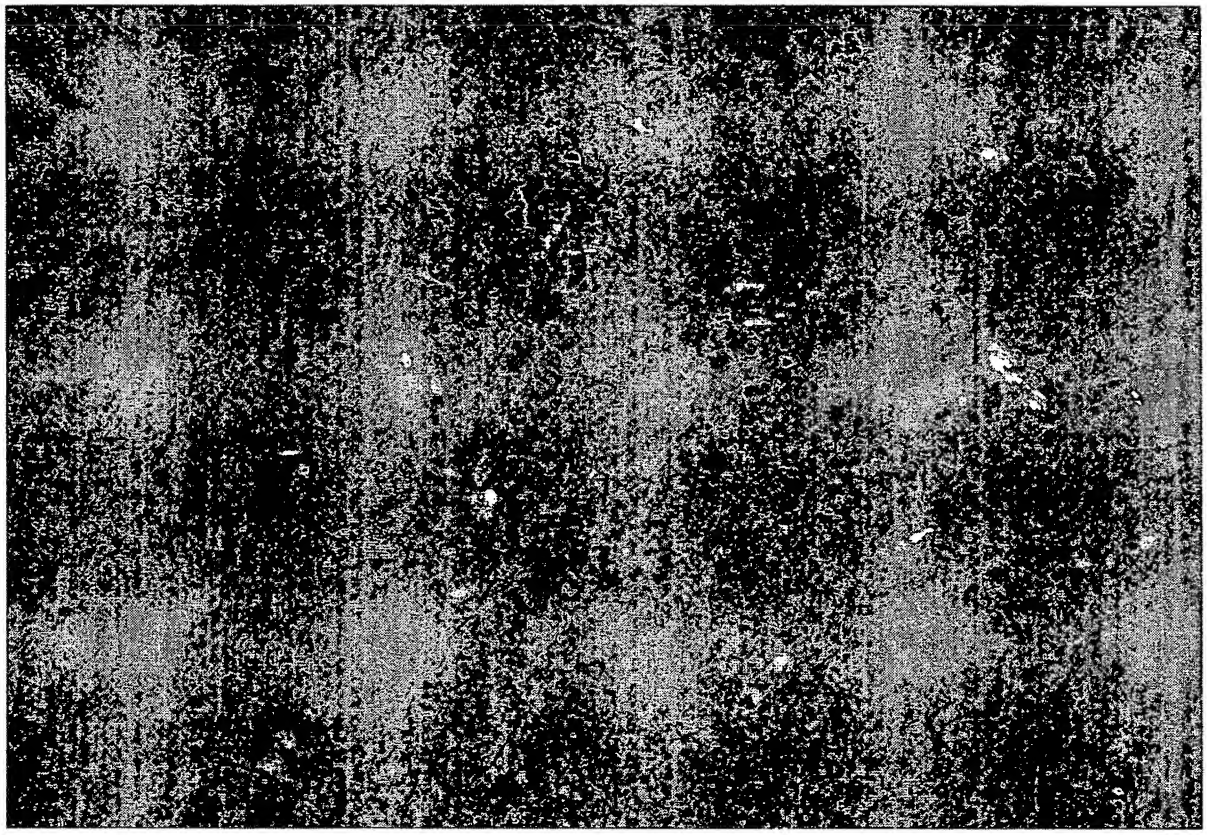


FIG. 8 Autoclave Temperature; Pilot Trial versus Lab Calcination

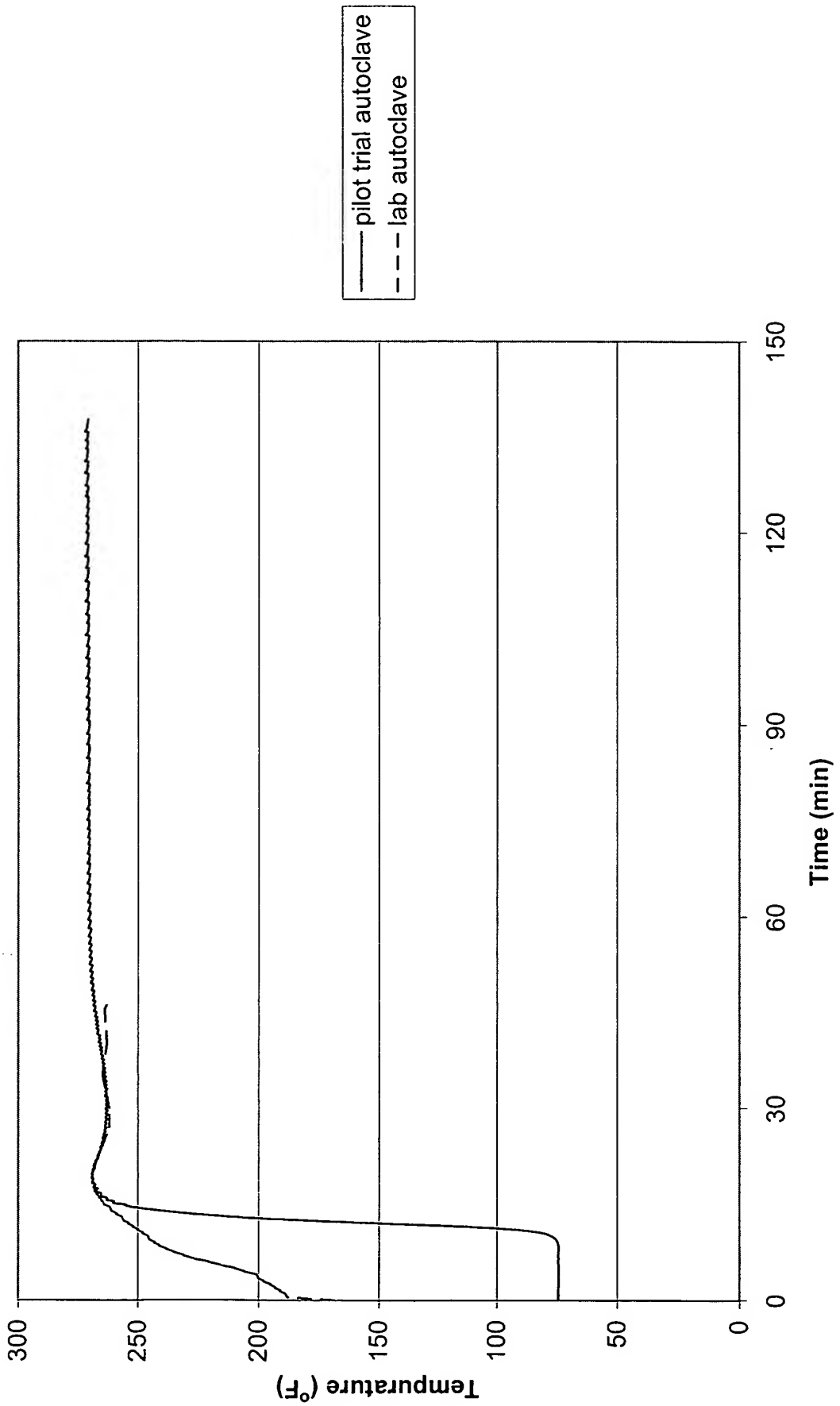


FIG. 9 Rate of Calcination; Gypsum Type 5%H_2O 200MPa @ 270°F

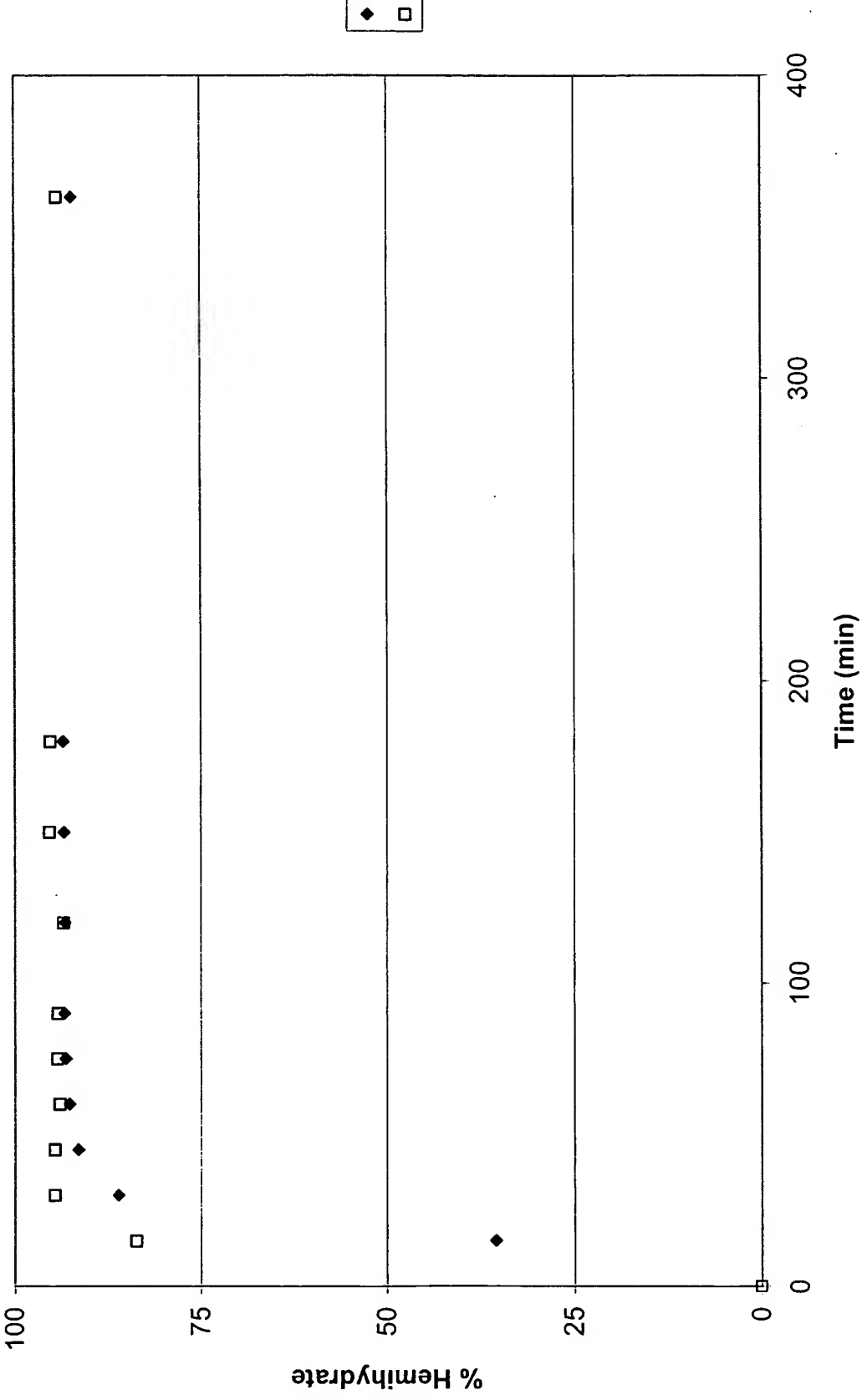


FIG. 10 Rate of Calcination; Effect of Pressure, KMp3 5% H_2O @ 270°C
30 min

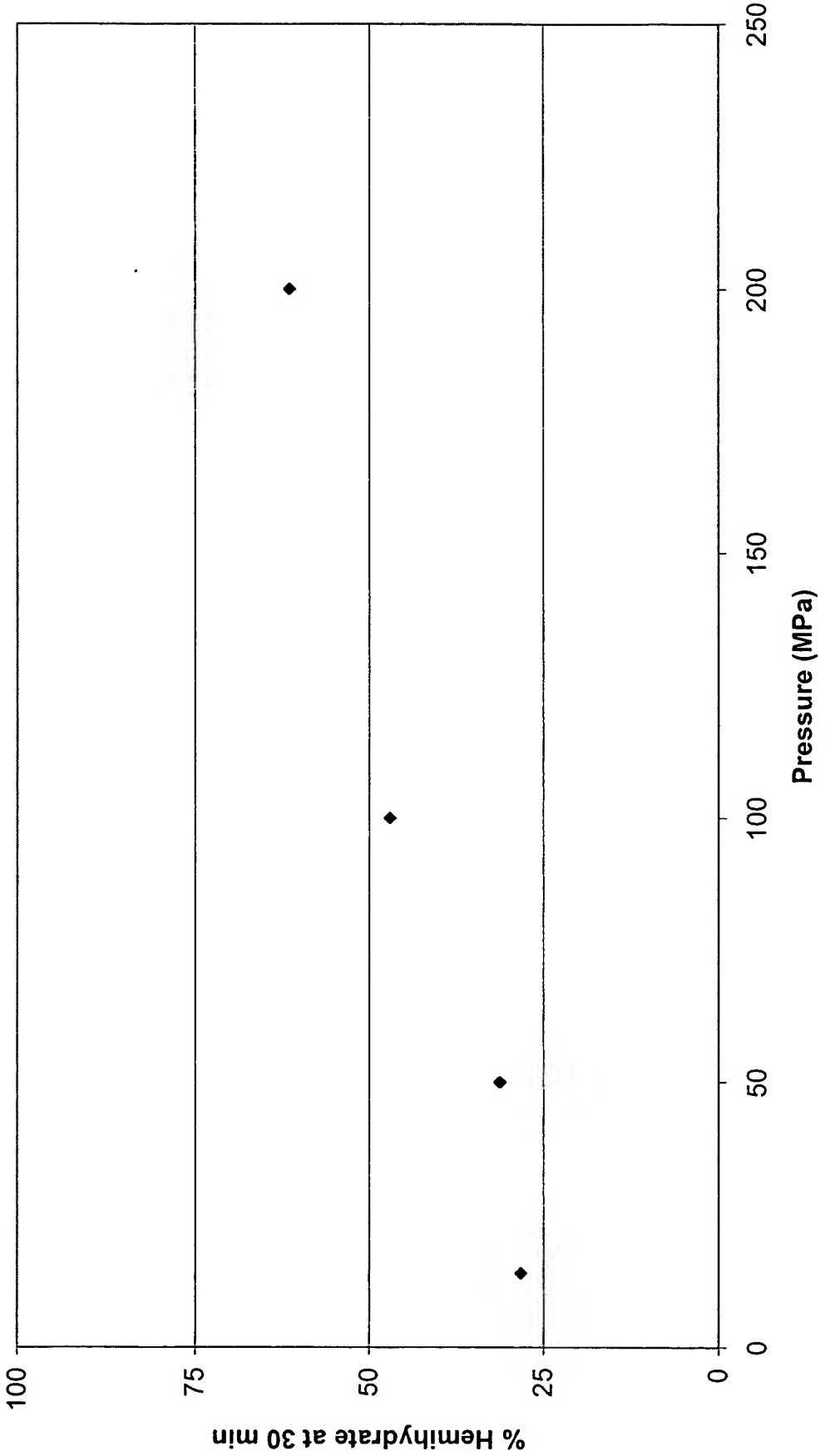


FIG. 11 Hammer Mill Grinding Apparatus

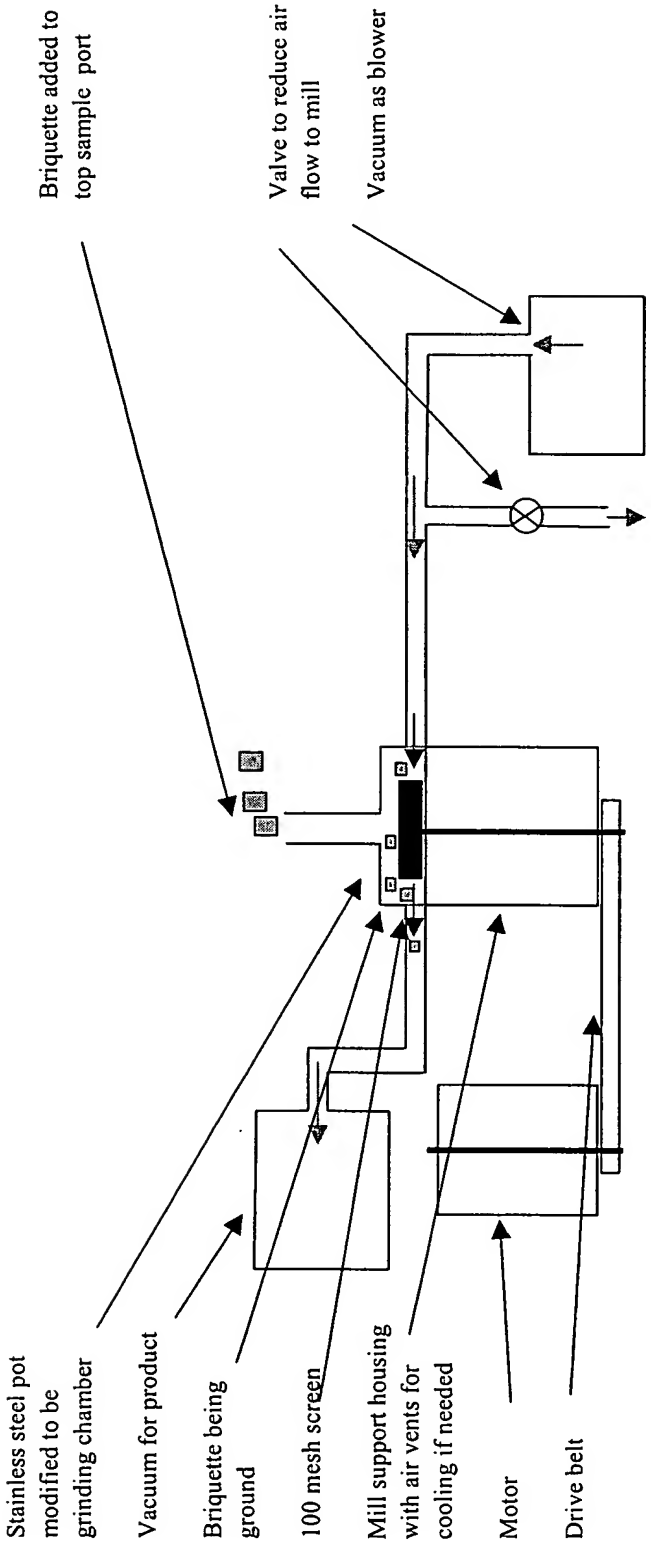


FIG. 12 Water Demand; Type of Gypsum 270°F 150 min

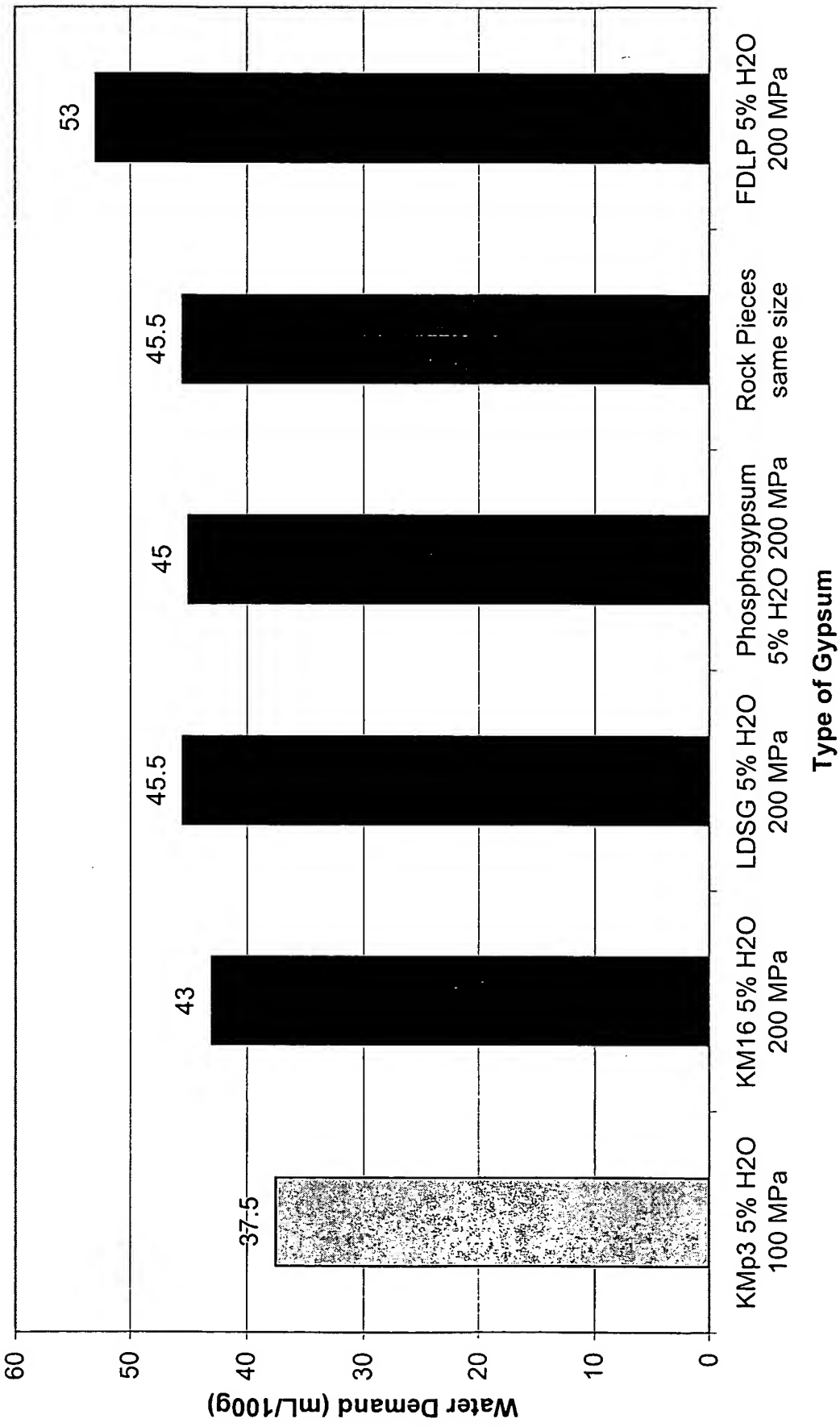


FIG. 13 Water Demand; Effects of Pressure 5% H_2O 270°F

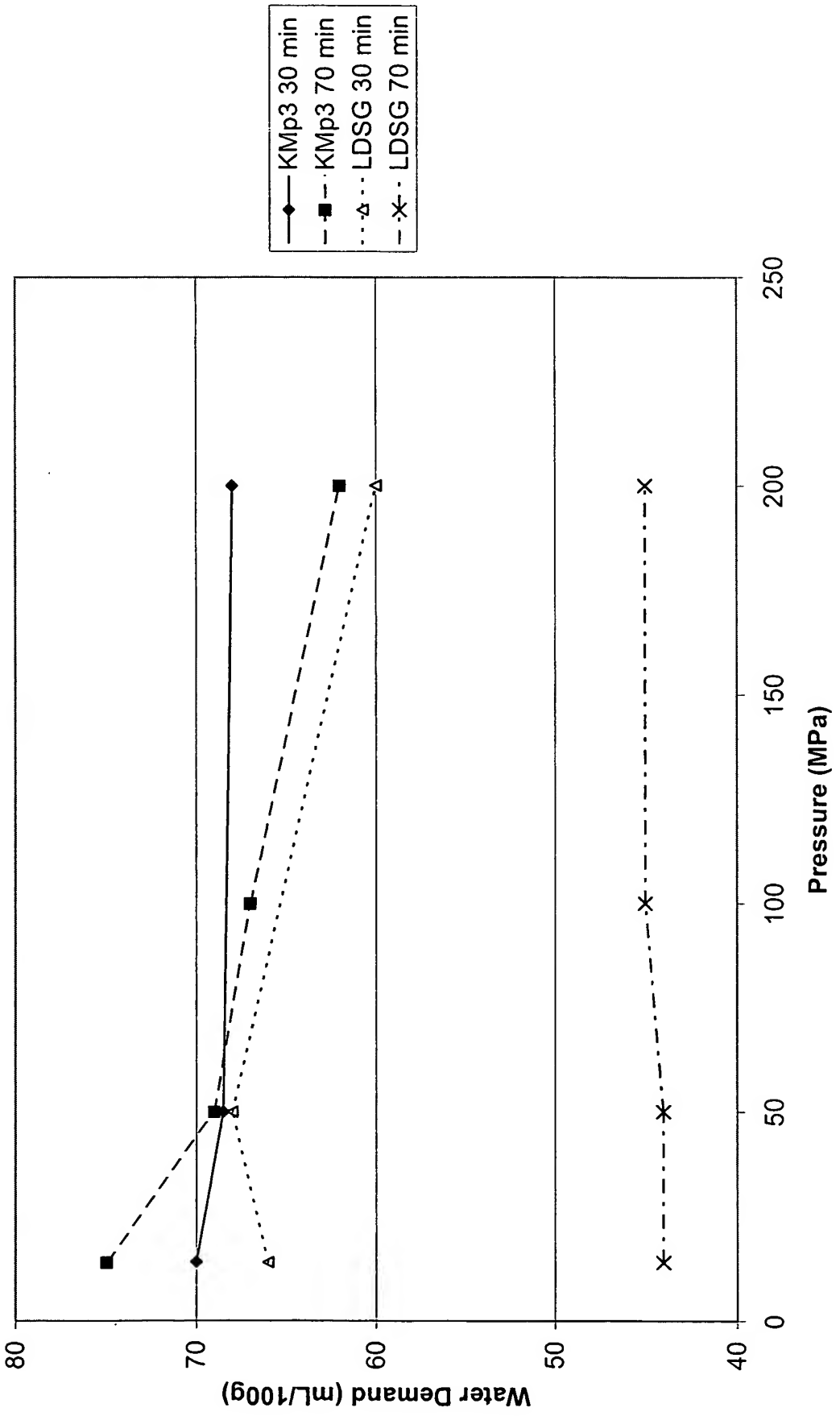


FIG. 14A

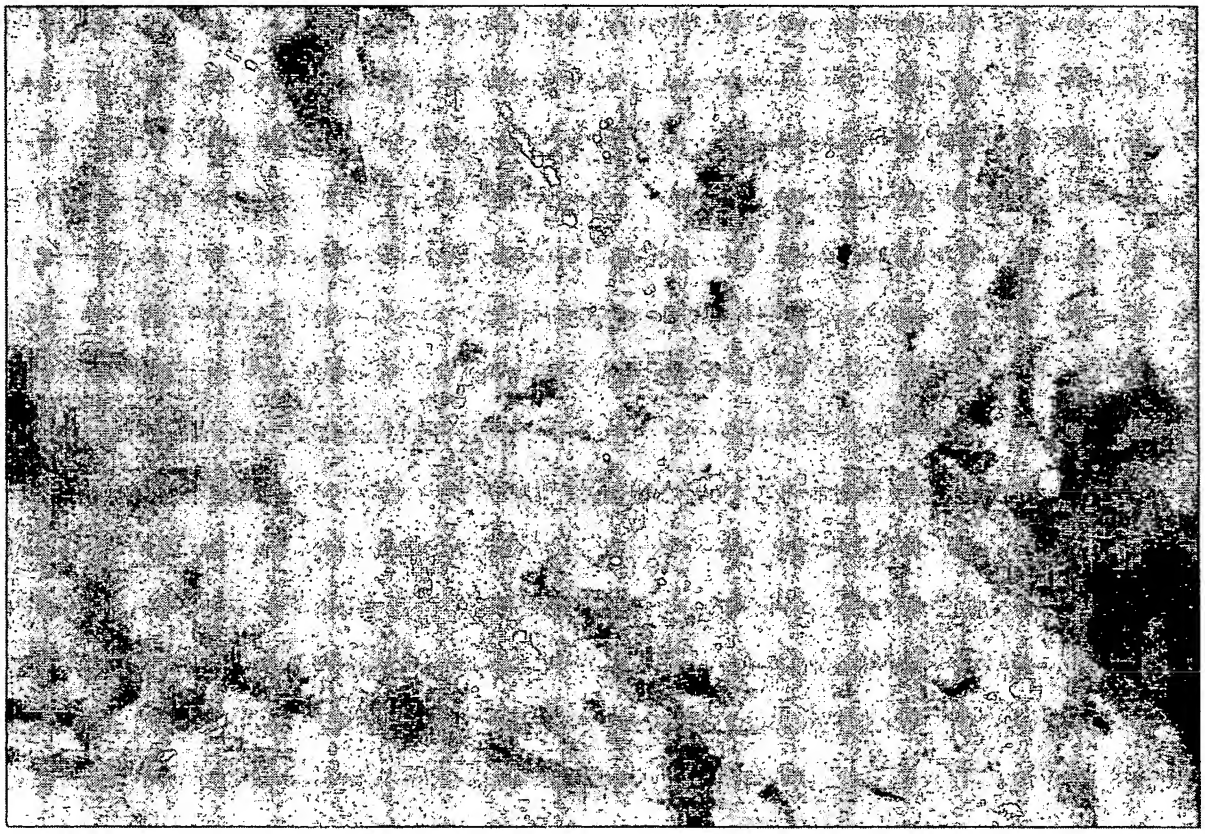


FIG. 14B

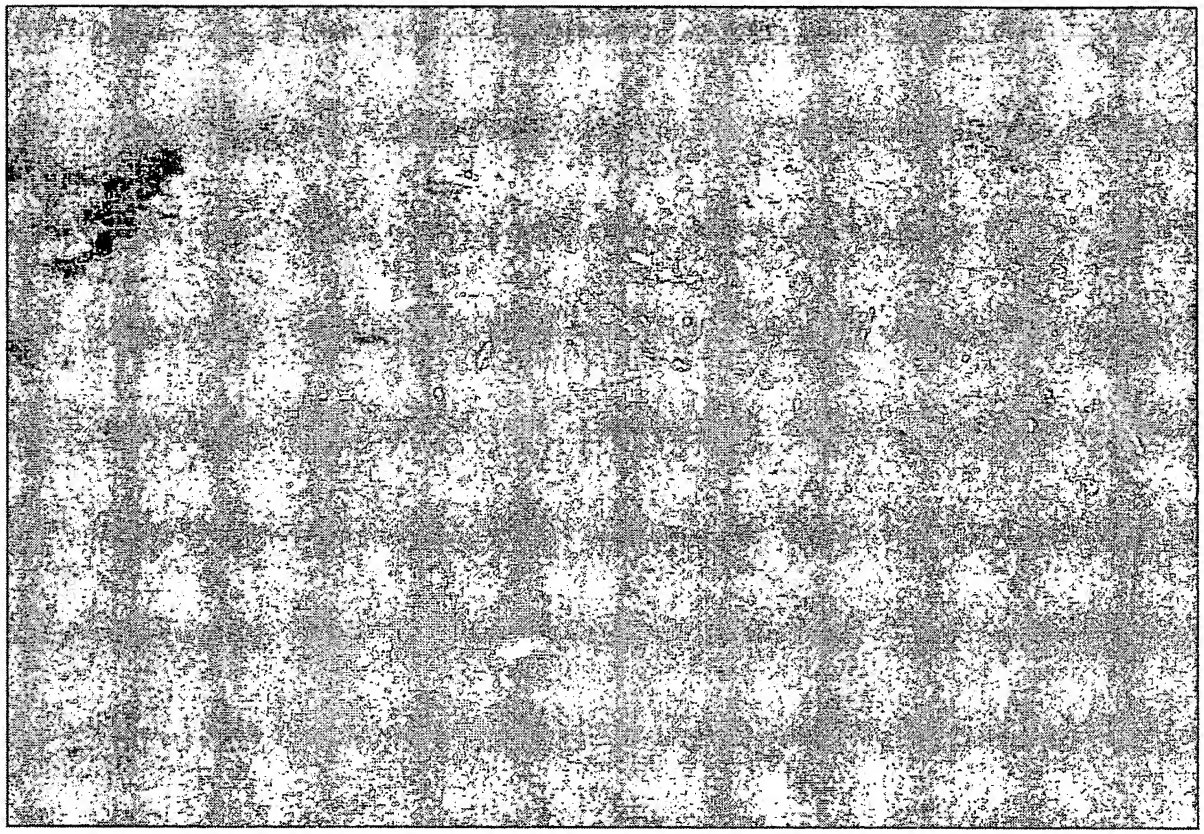
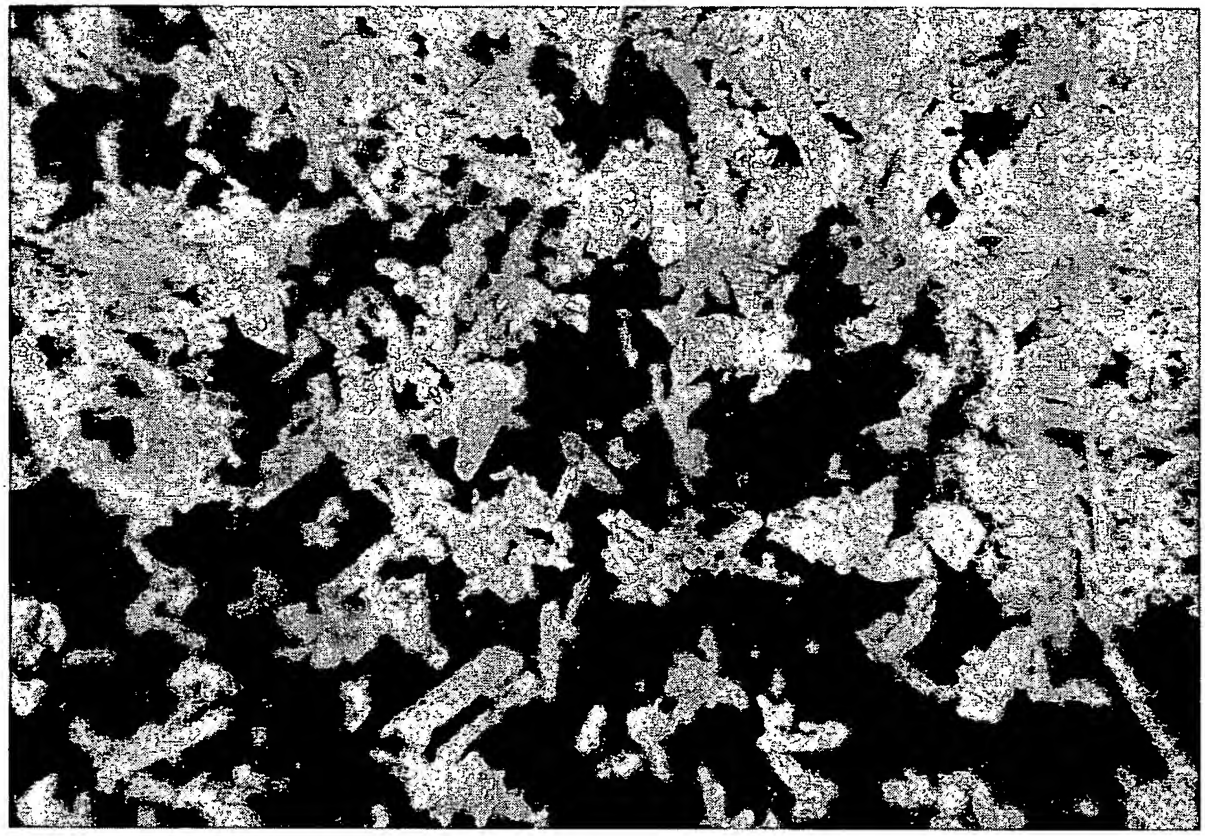


FIG. 14C

FIG. 14D



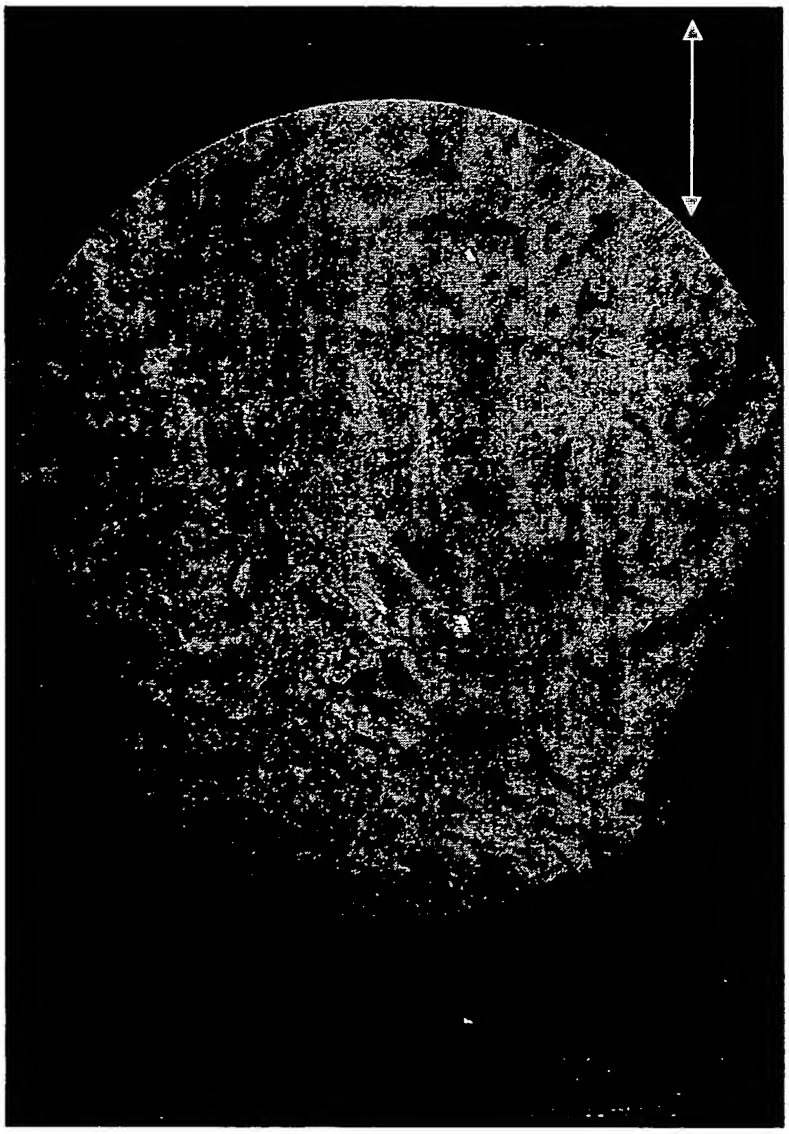


FIG. 14E

FIG. 14F

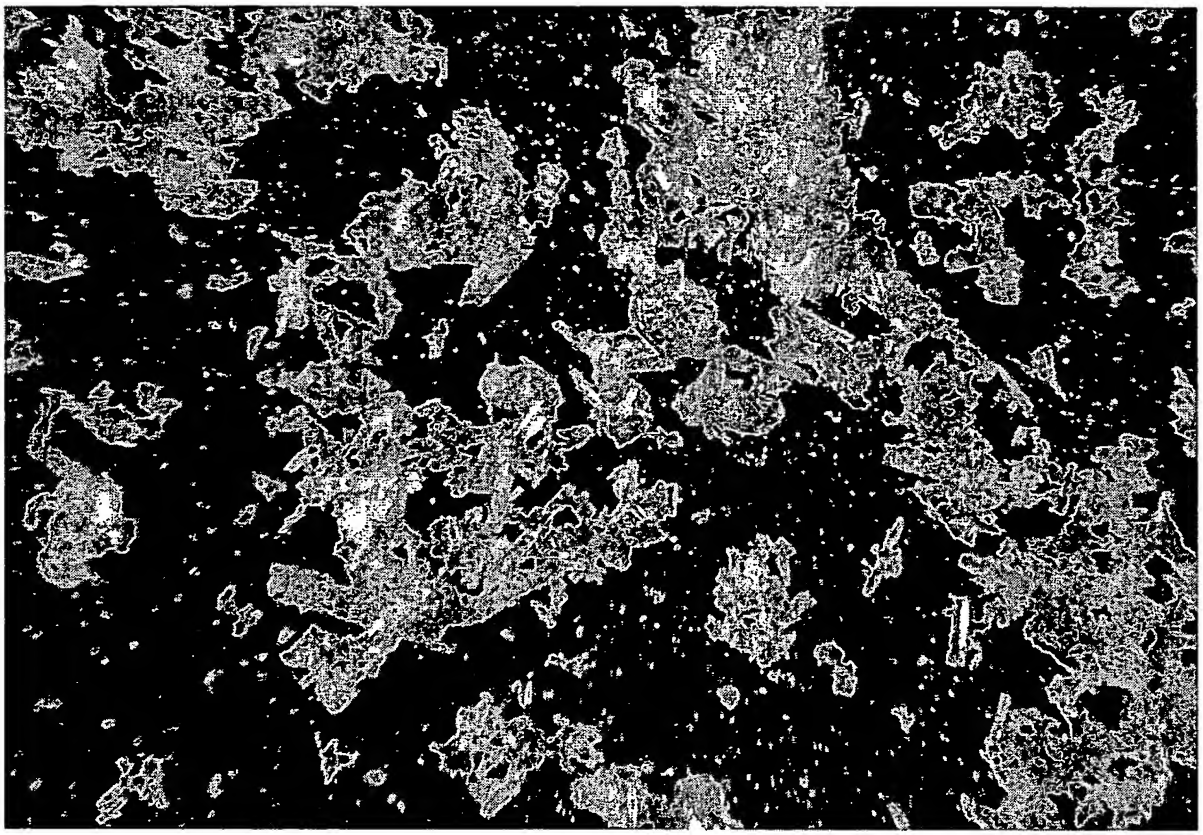


FIG. 14G

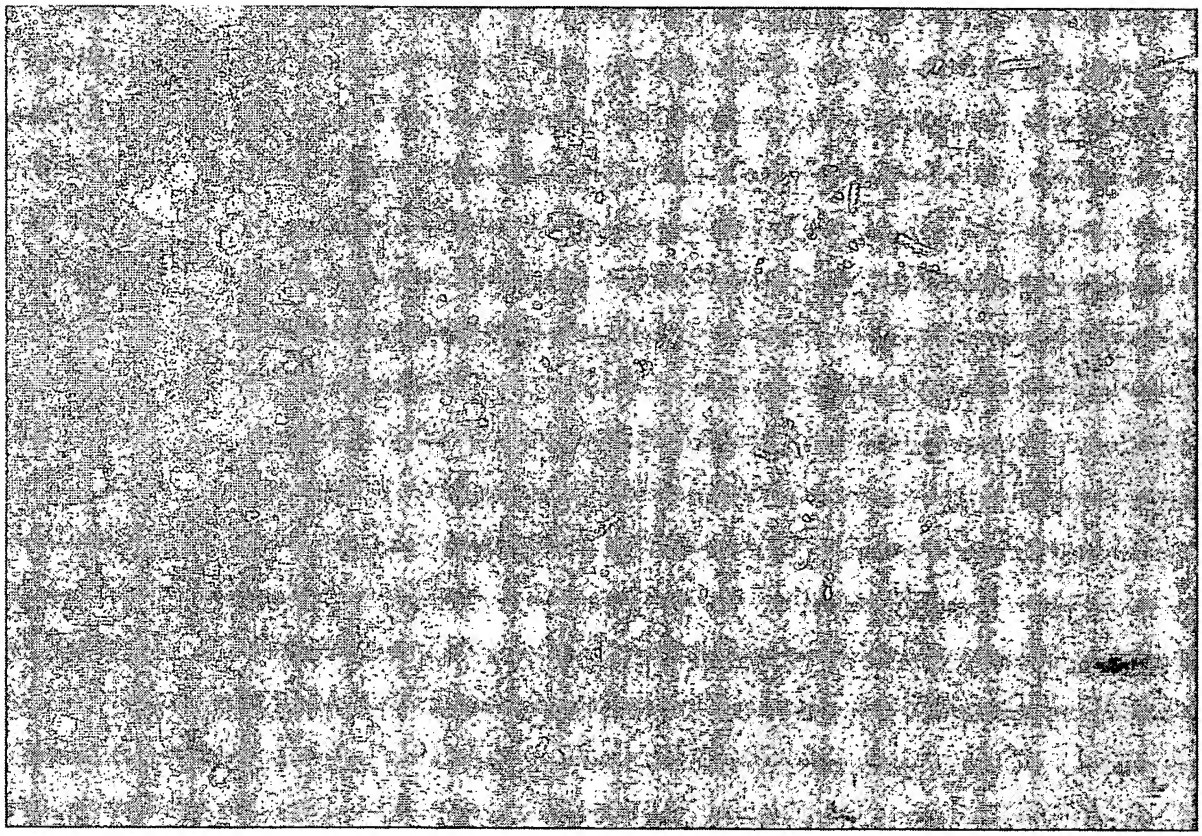


FIG. 14H

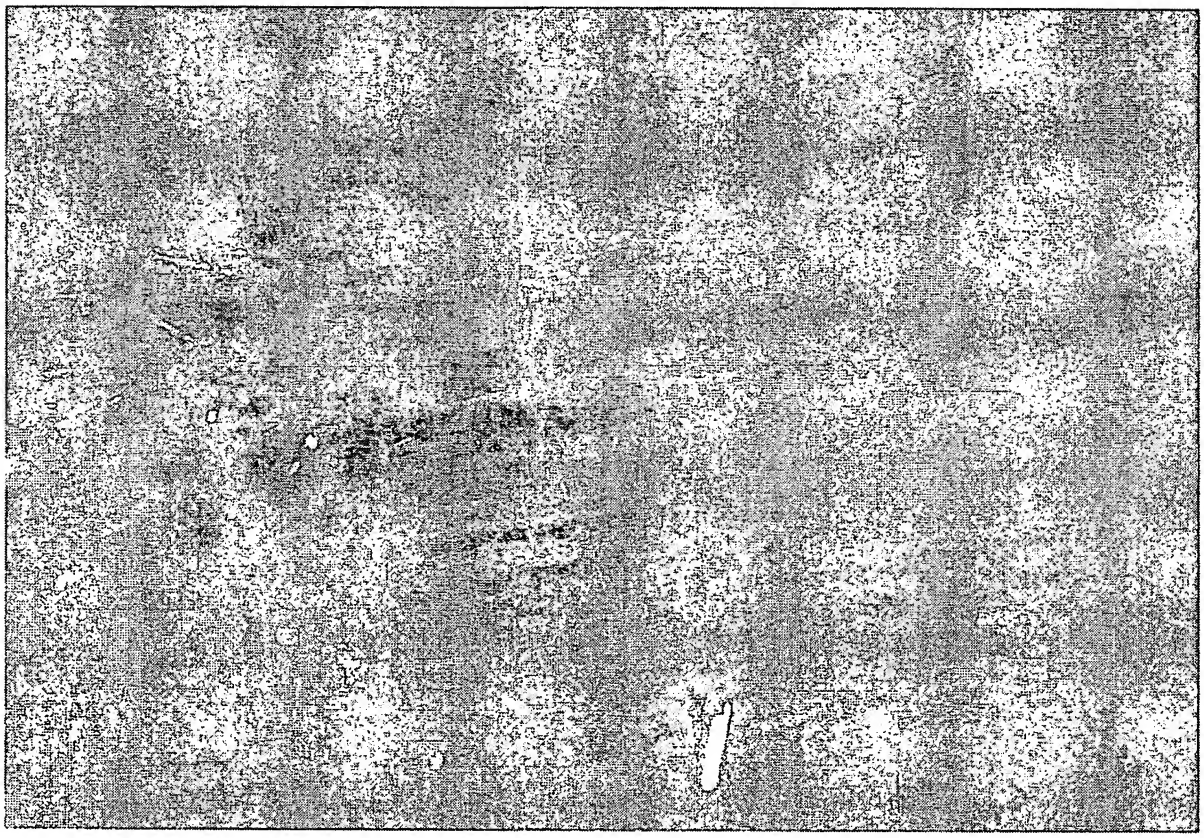
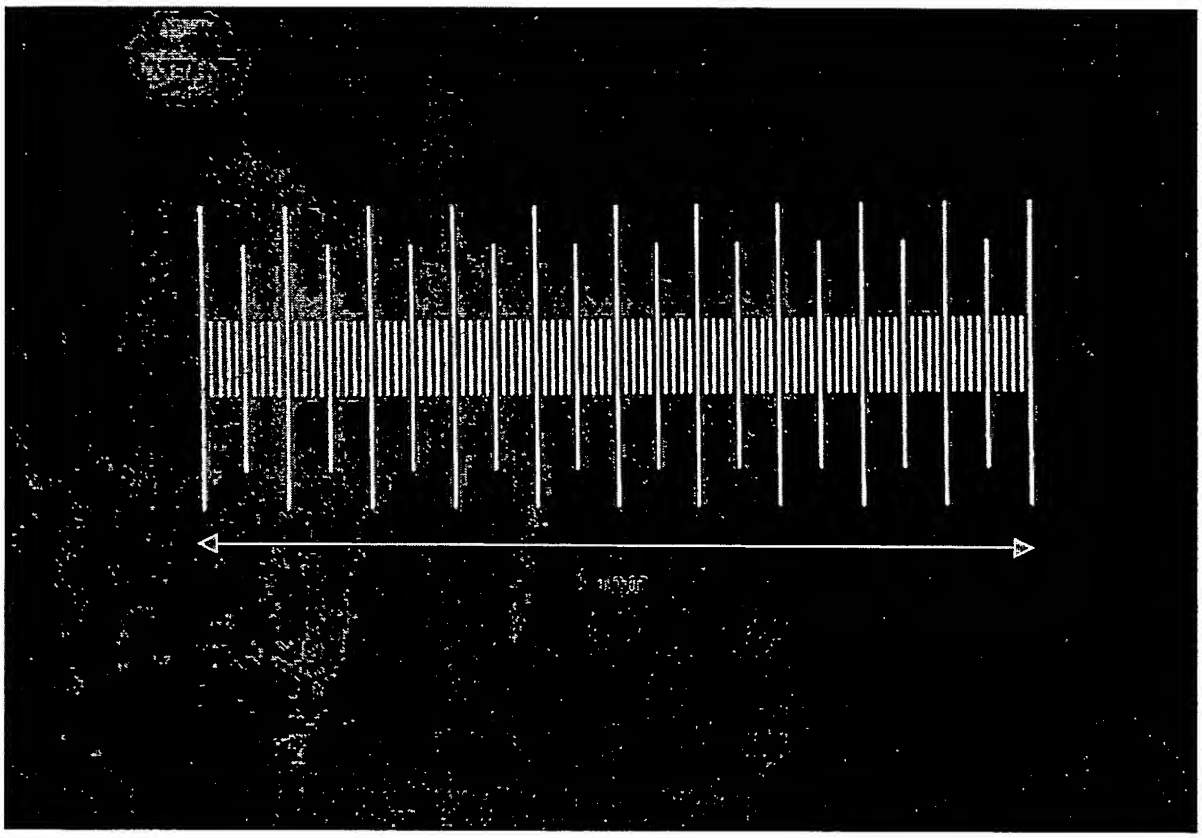


FIG. 14I



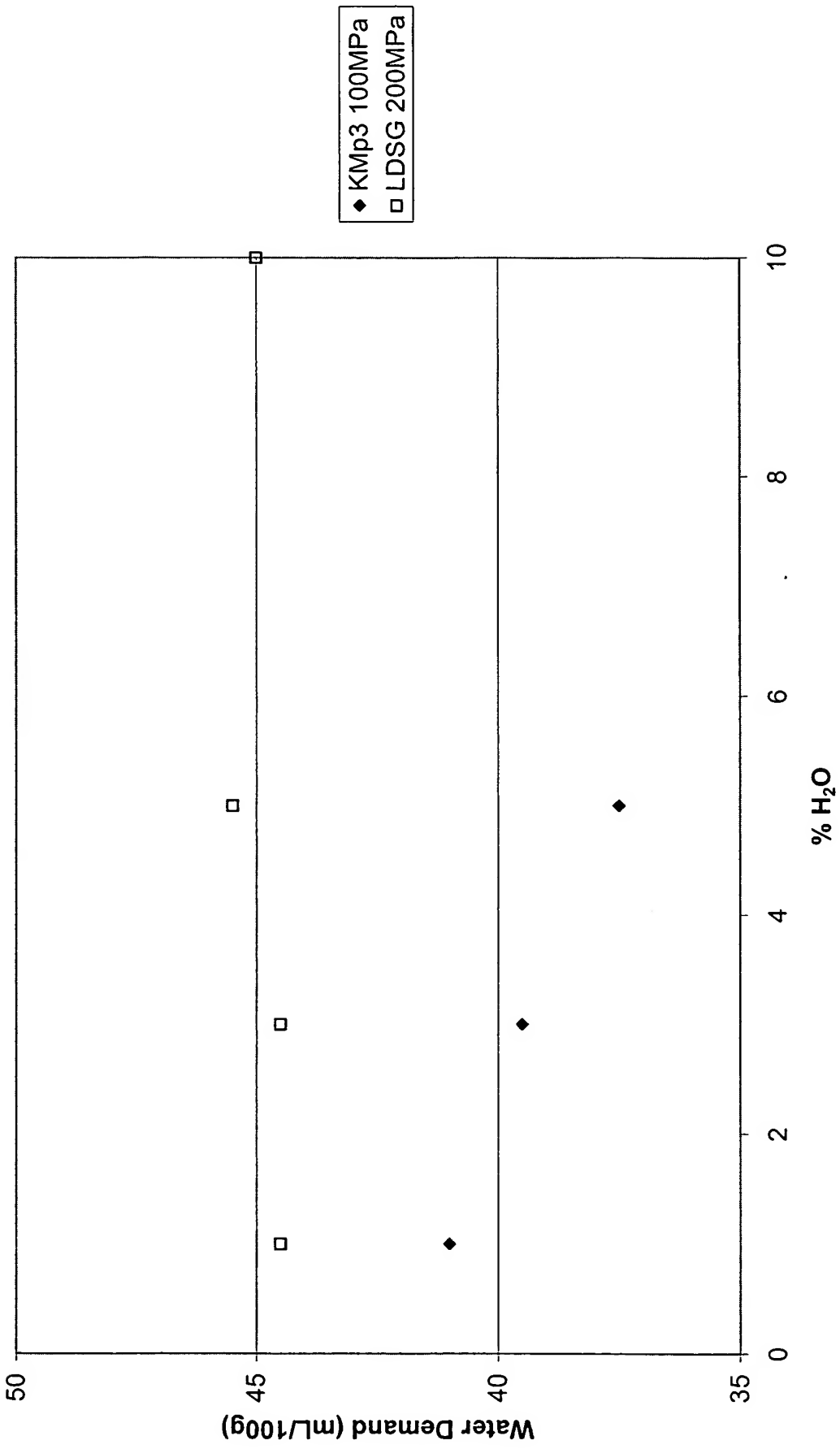


FIG. 15 Water Demand; Effects of H_2O 270°F 150 min

FIG. 16 Water Demand; Effects of Additives KMp3 3% H2O 200 MPa
270°F 150 min

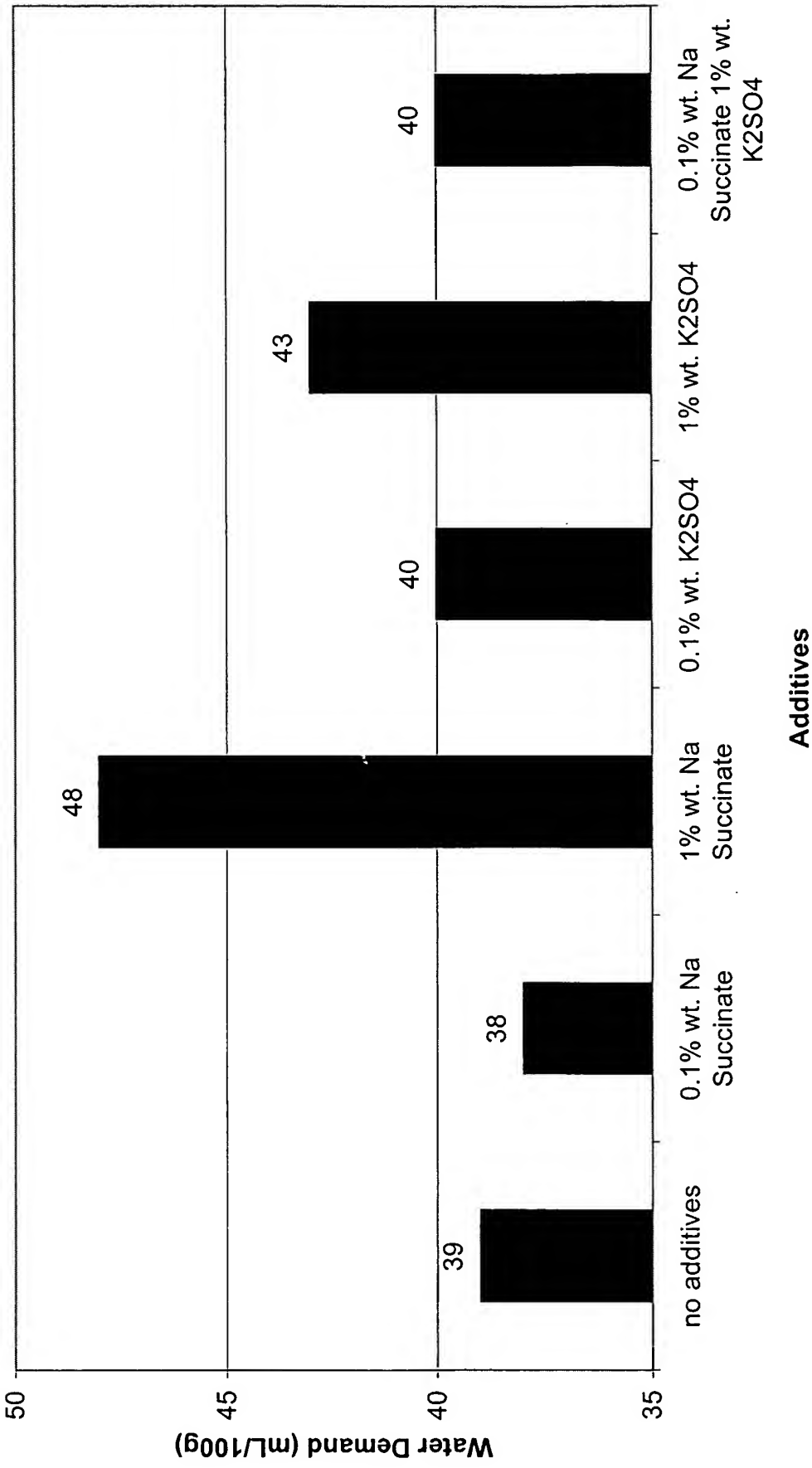


FIG. 17 Briquette Void Percentage; Calcined 150 min @ 270°C

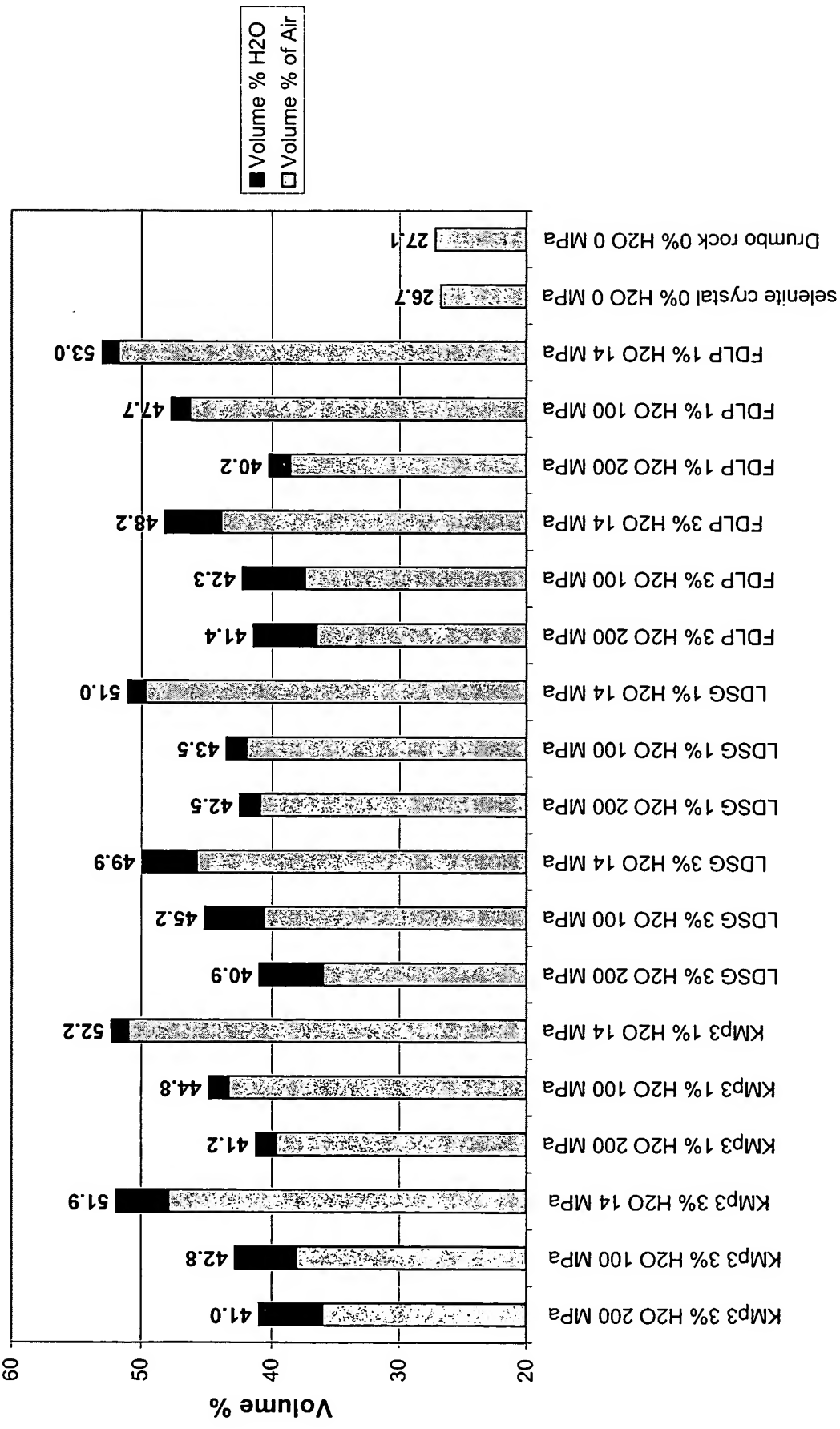


FIG. 18 Briquette Void Percentage; Uncalcined

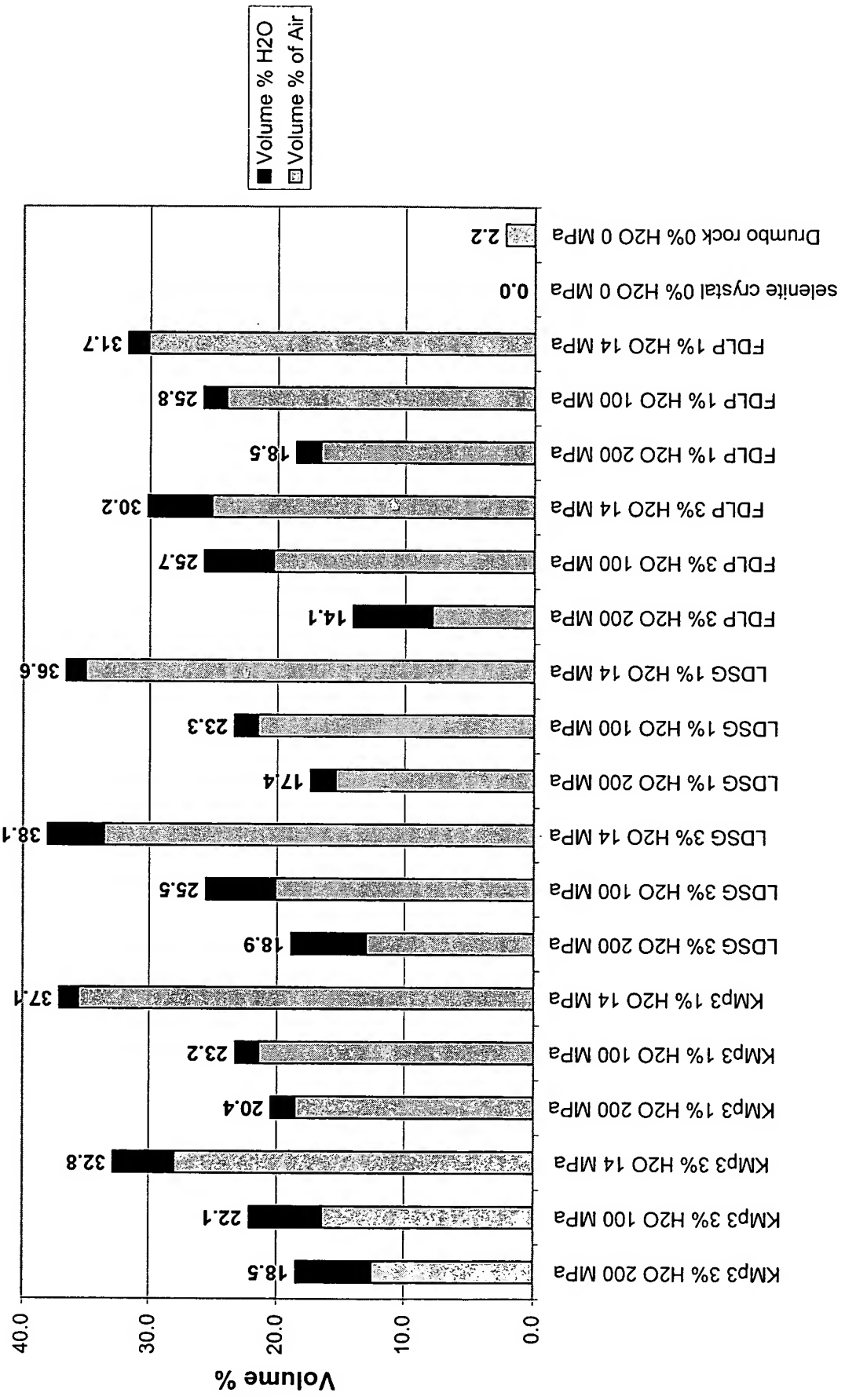


FIG. 19 Drying Rates of Large Briquettes; 104°F versus 194°F

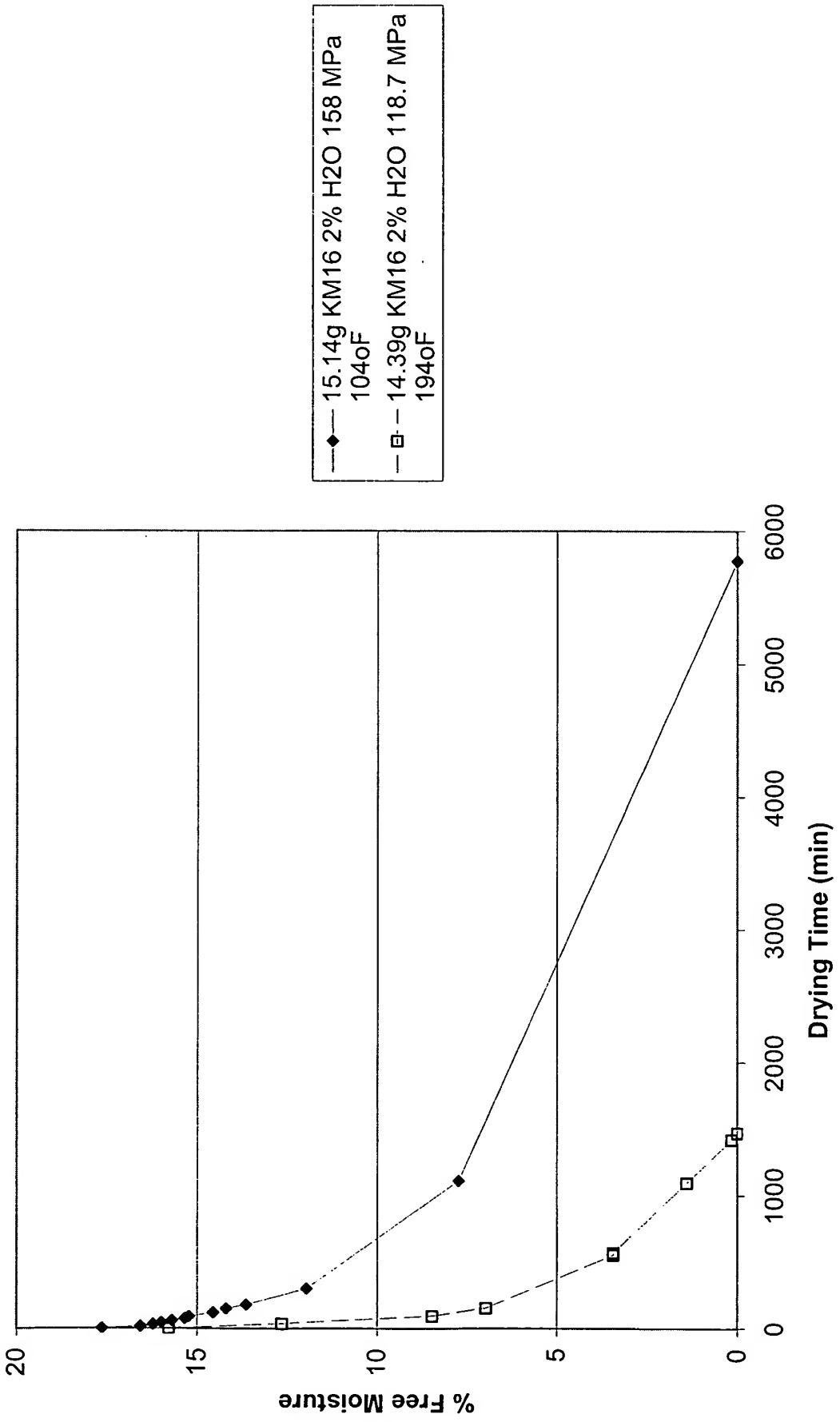


FIG. 20 Drying Rates at 194°F with Varying Drying/Crushing Methods; 18.64g KM16 5% H2O 152 MPa

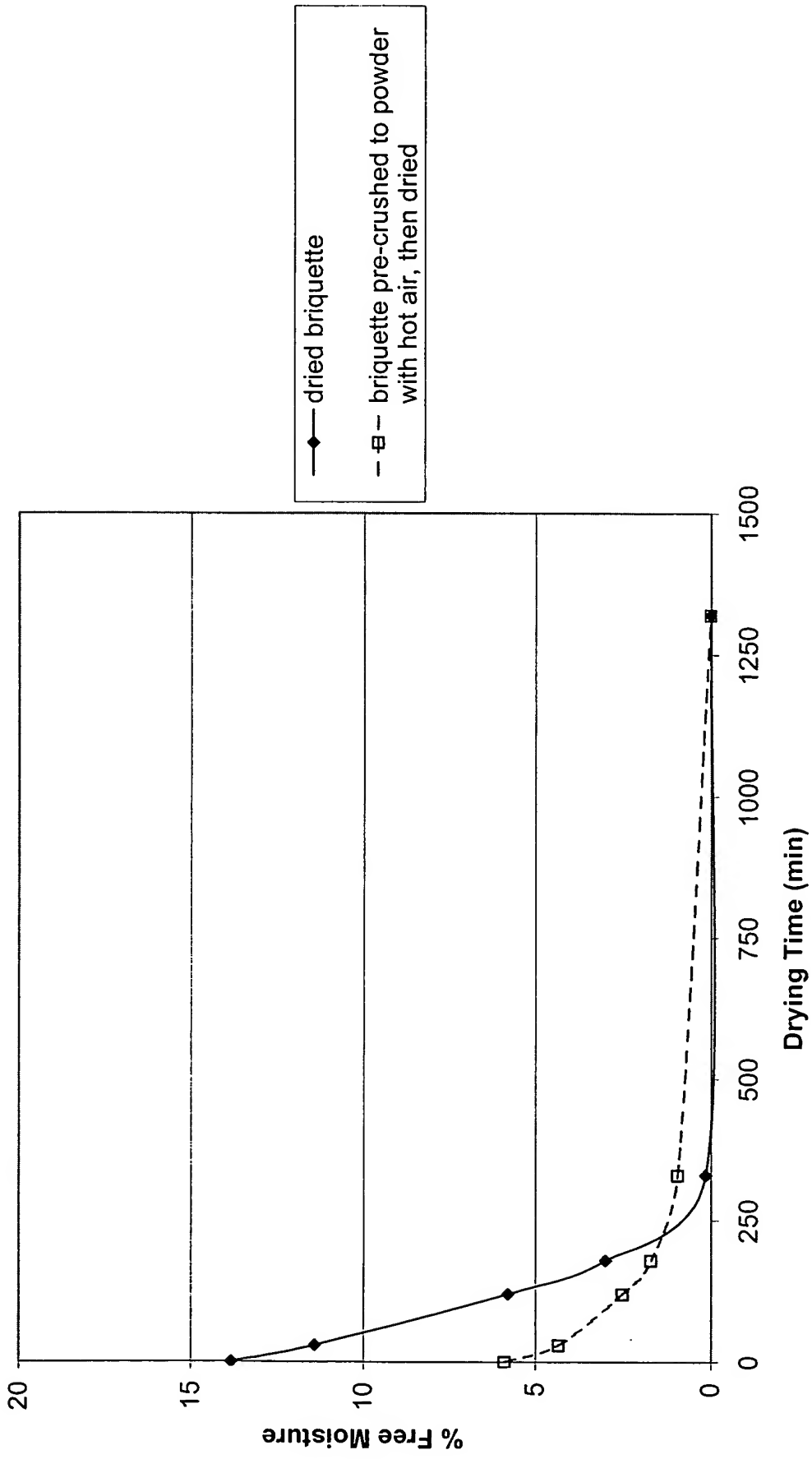


FIG. 21 Effect on Compressive Strength of Replacing Sand with Fly Ash

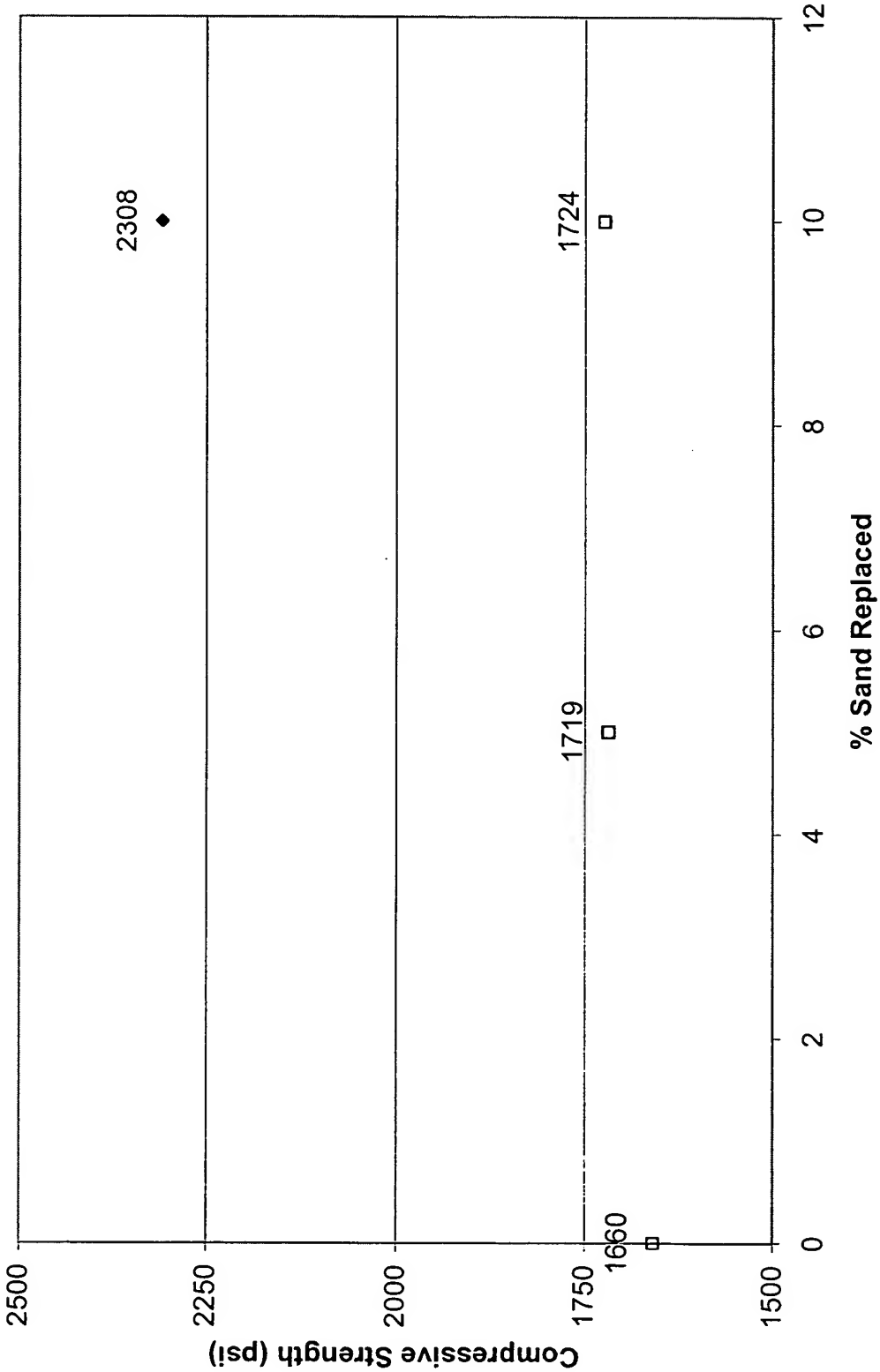


FIG. 22A Raw KMp3
Diameter if Sphere (Log_{10} scale) (X) versus Ellipsoid (B/A) (Y)
versus % of Volume (Z)

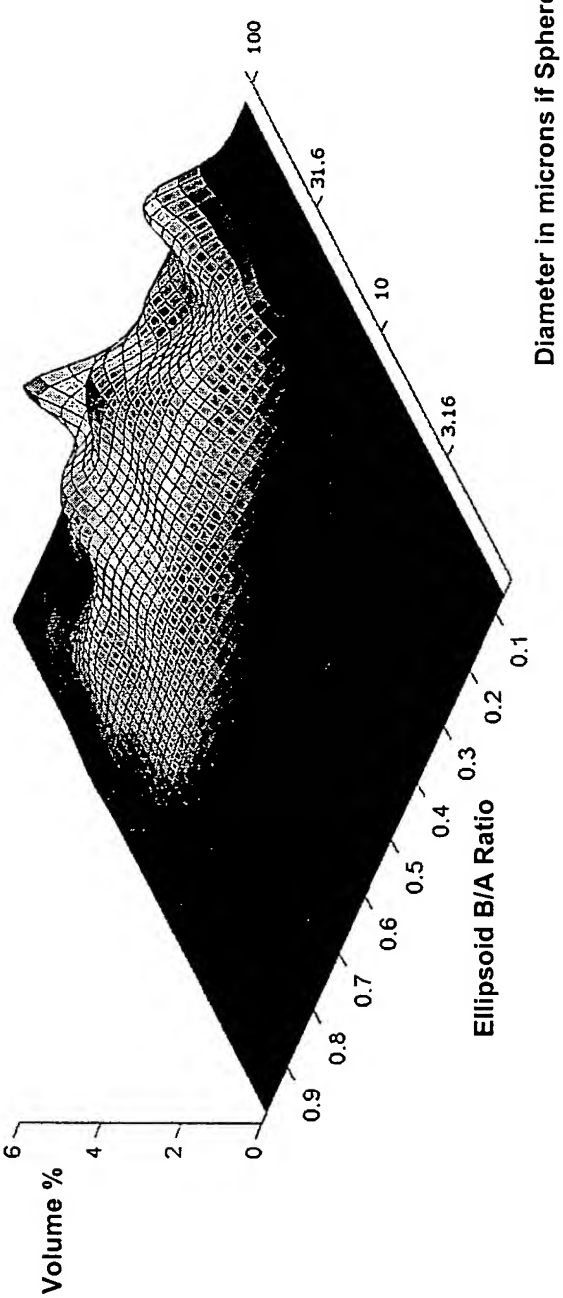


FIG. 22B Raw LDSG
Diameter if Sphere (Log_{10} scale) (X) versus Ellipsoid (B/A) (Y)
versus % of Volume (Z)

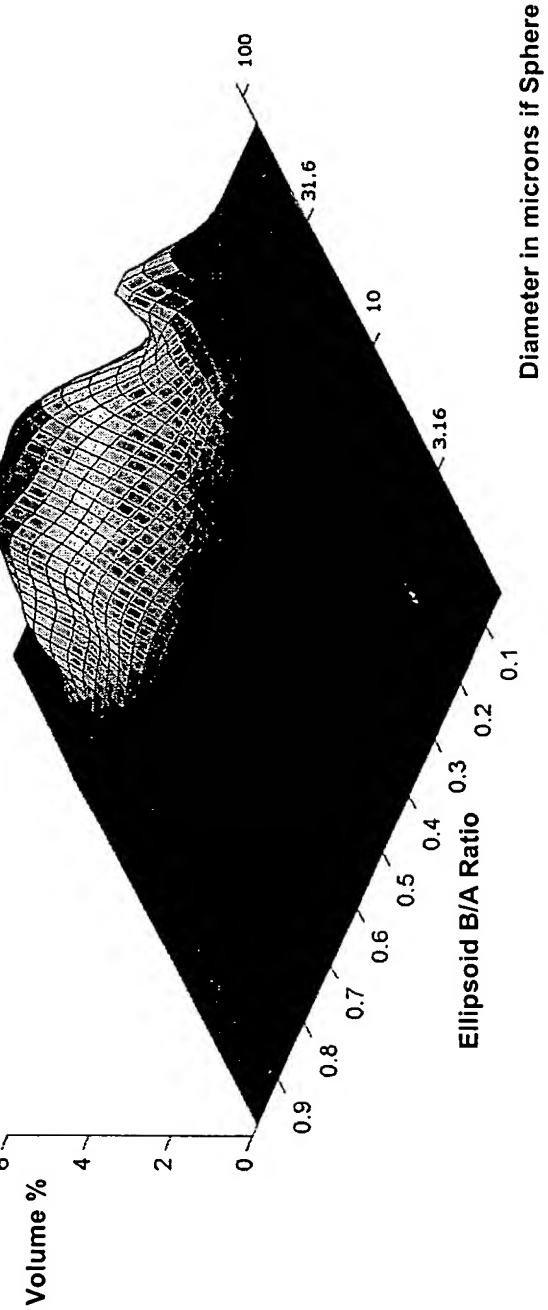


FIG. 23A Calcined and Ground KMp3 1% H_2O 100 MPa
Diameter if Sphere (Log_{10} scale) (X) versus Ellipsoid (B/A) (Y)
versus % of Volume (Z)

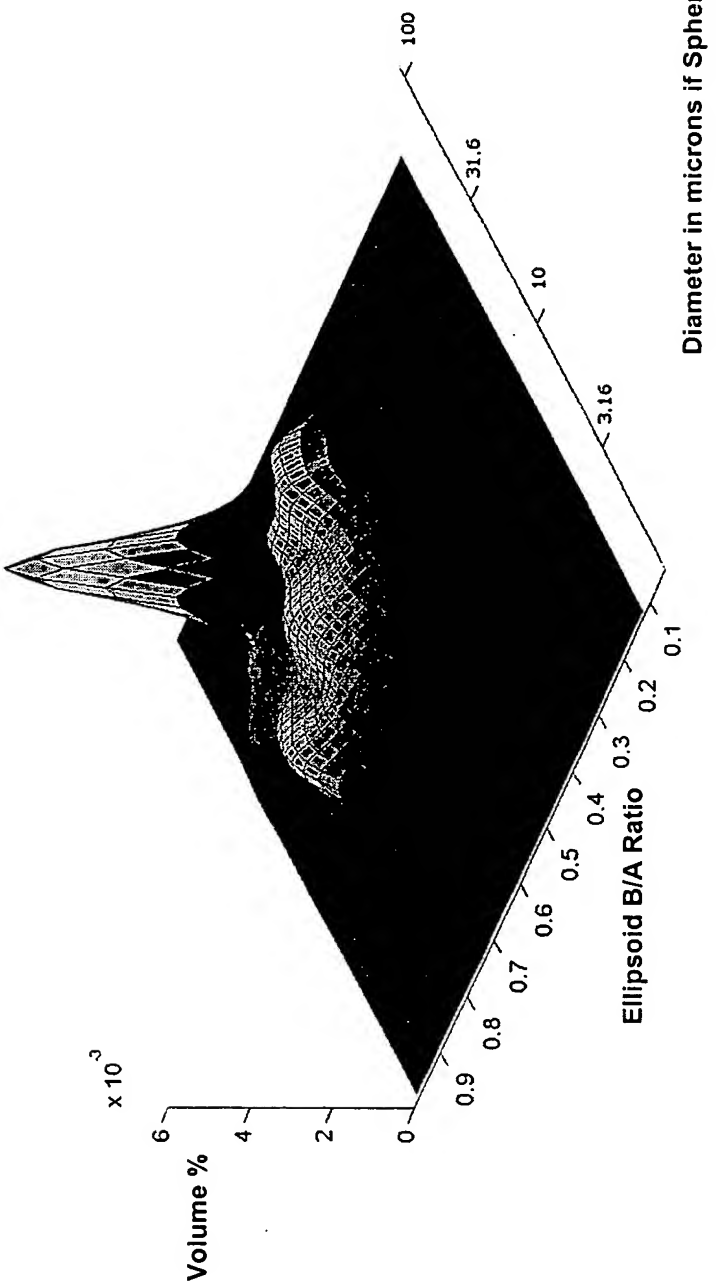


FIG. 23B Calcined and Ground KMp3 5% H_2O 100 MPa
Diameter if Sphere (Log_{10} scale) (X) versus Ellipsoid (B/A) (Y)
versus % of Volume (Z)

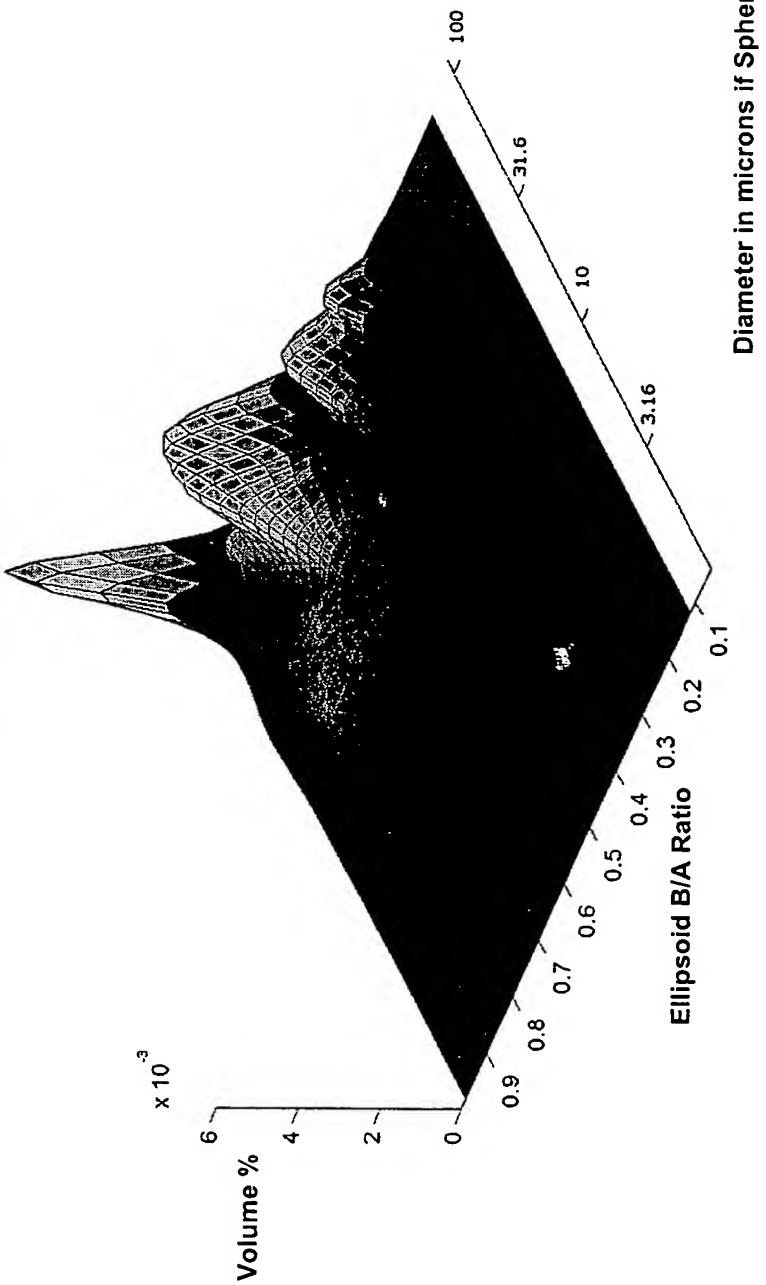


FIG. 23C Calcined and Ground LDSG 5% H_2O 100 MPa
Diameter if Sphere (Log_{10} scale) (X) versus Ellipsoid (B/A) (Y)
versus % of Volume (Z)